

OLYMPUS®

Camera Mount Adapter Series
Camera Adapter Series

INSTRUCTIONS

CAMERA ADAPTER SYSTEM

This system employs a UIS2/UIS (Universal Infinity System) optical design, and should be used only with UIS2/UIS type microscope frames, eyepieces, objectives and condensers. Less than optimum performance may result if inappropriate accessories are used. To ensure the safety, obtain optimum performance and to familiarize yourself fully with the use of this system, we recommend that you study this manual thoroughly before operating the system. Retain this instruction manual in an easily accessible place near the work desk for future reference.



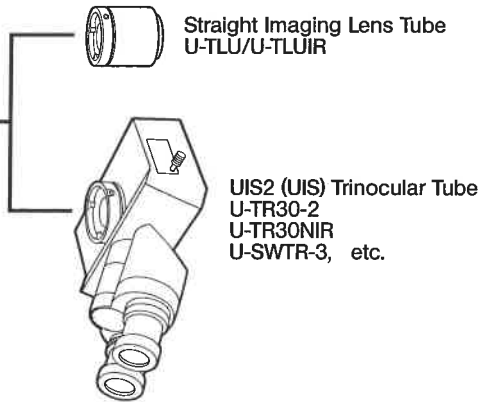
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Note) Restrictions on camera

- A camera cannot be used if its C-mount plane is located at a lower level than the camera body surface.
- If the camera is larger by more than 68 mm in the lateral direction from the optical direction, the camera may interfere with the microscope when it is mounted on a trinocular observation tube, unless the camera adapter (or the camera mount adapter) is long enough. Also, when the camera is mounted on the side port of the IX2 series, the camera contacts the desktop if it is larger by more than 89 mm in the bottom direction from the optical axis.
- When a camera has a larger image sensor than the specified size (see page 3), the light in the image peripheries may be insufficient or the peripheral parts of image may be cut off.



2 Camera Recording Magnification

Objective magnification x Camera adapter magnification

3 Monitor Observation Magnification

Camera recording magnification (see above) x $\frac{\text{Monitor diagonal length* (mm)}}{\text{Image sensor diagonal length* (mm)}}$

* The diagonal lengths of monitors and image sensors are variable between manufacturers. Note that they are nominal values and that the above formula does not give a very accurate monitor observation magnification.

<< Nominal diagonal length of image sensors (Typical values) >>

1 in. → 16 mm, 2/3 in. → 11 mm, 1/2 in. → 8 mm, 1/3 in. → 6 mm, 1/4 in. → 4 mm.

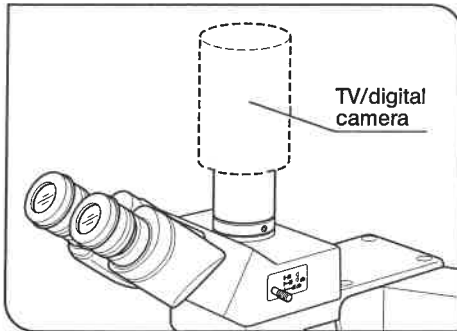


Fig. 2

2 Mounting the TV Camera/Digital Camera

(Fig. 2)

Bayonet-Mount Camera

- Remove the lens or viewfinder from the camera.
- Align the positioning groove on the camera with the pin on the mount adapter and turn in the camera firmly.

C-Mount Camera

Screw the C-mount camera into the mount adapter and secure firmly.

With the U-TV0.35XC-2, U-TV0.5XC-3 or U-TV0.63XC

Refer to the operating instruction provided with the camera adapter.

With the U-TV1X-2 or U-TV0.25XC (Fig. 3)

Loosen clamping screws ① and ② using the Allen screwdriver. While observing the monitor image and keeping the camera mount adapter ③ stationary, rotate the camera adapter ④ until the image is in focus and then tighten screws ① and ② again.

- Ⓢ The shape of the microscope frame may make it impossible to tighten clamping screw ①. In this event, note the current position of the clamping screws, rotate only the camera adapter ④ and then tighten screw ①. Then return to the original position and tighten screw ②.

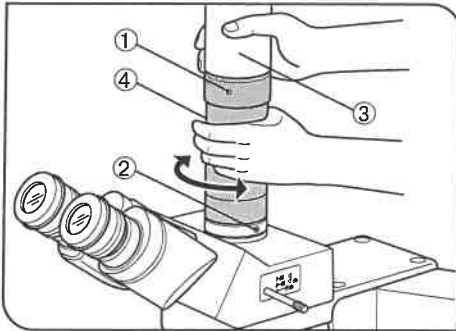


Fig. 3

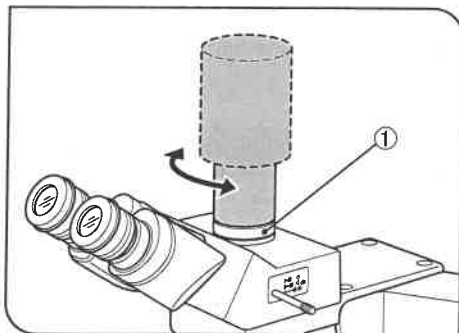


Fig. 5

4 Rotating the Camera

(Figs. 5 & 6)

1. When the zoom lens type camera adapter is not used:
Loosen clamping screw ① of the straight tube of trinocular tube, rotate the camera, and tighten screw ① again. (Fig. 5)
2. When the zoom lens type camera adapter is used:
Loosen clamping screw ② on the upper part of the zoom lens, rotate the camera mount adapter ③ and focusing ring ④ together, and tighten screw ② again. (Fig. 6)

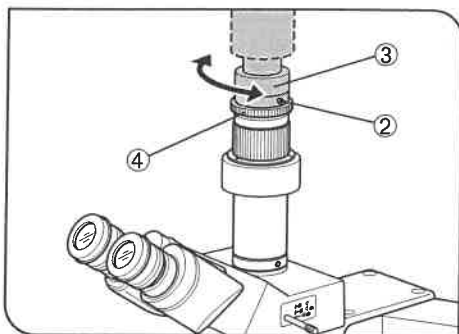


Fig. 6

5 TROUBLESHOOTING GUIDE

Under certain conditions, performance of the system may be adversely affected by factors other than defects. If problems occur, please review the following list and take remedial action as needed. If you cannot solve the problem after checking the entire list, please contact Olympus for assistance.

Problem	Cause	Remedy	Page
Dust is visible. 1. Dust moves when the specimen is moved. 2. Dust moves when the camera is rotated.	1. Dust adhering to the specimen. 2. Dust adhering to the camera.	Clean.	-
Peripheries of monitor image are cut off.	The camera adapter magnification does not match the image sensor size.	Use an optimum camera adapter.	3
Poor color reproduction.	White balance is not adjusted.	Adjust as required.	7
	Monitor tone is not adjusted.	Adjust as required.	7
Image is not focused.	The parfocality is adjusted improperly.	Adjust correctly.	7-9
Monitor image is white and invisible.	The camera sensitivity is too high or the camera does not have the auto brightness control facility.	Reduce the microscope's illumination.	-