

INSTRUCTIONS

U-KPA

SIMPLE POLARIZING INTERMEDIATE ATTACHMENT

This instruction manual is for the Olympus Simple Polarizing Intermediate Attachment (U-KPA). To ensure the safety and obtain optimum performance and to familiarize yourself fully with the use of this attachment, we recommend that you study this manual thoroughly before operating the attachment. Retain this instruction manual in an easily accessible place near the work desk for future reference.

IMPORTANT

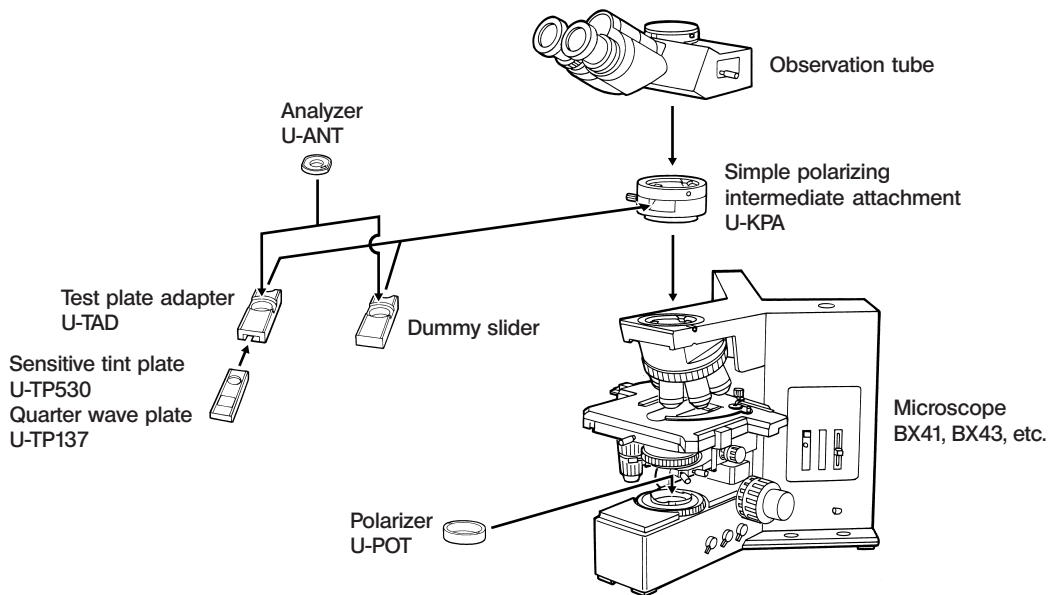
This unit employs a UIS/UIS2 (universal infinity system) optical design, and should be used only with the UIS/UIS2 microscope, eyepieces, objectives, condensers, etc. Less than optimum performance may result if inappropriate accessories are used.

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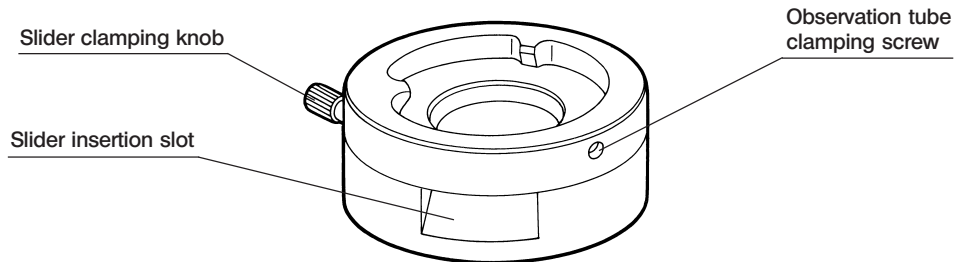
1 SYSTEM DIAGRAM

Mounting the simple polarizing intermediate attachment (U-KPA) (inclusive the dummy slider) on the microscope and using the following modules in combined used will allow the microscope to be used for simple polarized light observation.

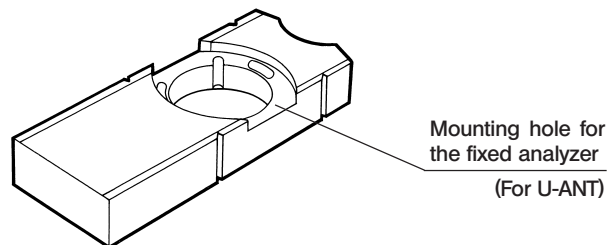


2 CONTROLS

Simple Polarizing Intermediate Attachment (U-KPA)



Dummy Slider



3 ASSEMBLY

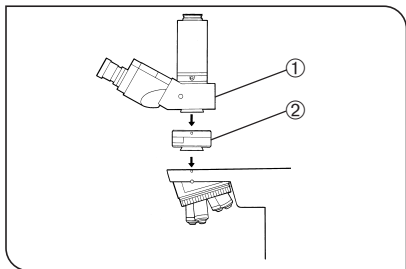


Fig. 1

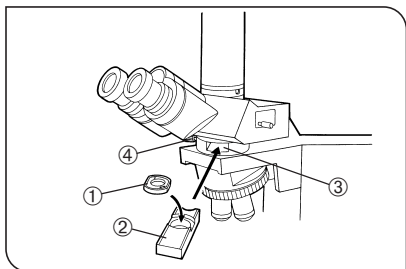


Fig. 2

Mounting the Simple Polarizing Intermediate Attachment (U-KPA) (Fig. 1)

1. Using the Allen screwdriver provided with the microscope frame, loosen the observation tube clamping screw and remove the observation tube ①.
2. Insert the simple polarizing intermediate attachment (U-KPA) ② into the opening on the microscope frame where the observation tube was mounted. The direction of the U-KPA should be adjusted later, but at this point place the U-KPA so that the sensitivity tint plate is pointed toward the rear of the microscope frame.
3. Mount the observation tube on top of the U-KPA.

Mounting the Fixed Analyzer (U-ANT) (Fig. 2)

1. Holding the fixed analyzer (U-ANT) ① with the engraved side upward, align the indices and place the analyzer in the mounting hole of the dummy slider ② or the test plate adapter (U-TAD). The analyzer will be held in place by a magnet.
2. Insert the dummy slider ② or the test plate adapter into the slider insertion slot ③ of the U-KPA, then tighten the clamping knob ④.

«When Using Test Plates»

1. Loosen the test plate clamping knob of the test plate adapter (U-TAD).
2. Insert the sensitive tint plate (U-TP530) or quarter wave plate (U-TP137) into the U-TAD and then tighten the clamping knob.

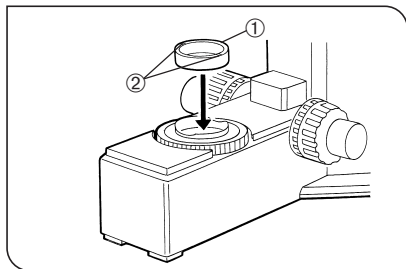


Fig. 3

Mounting the Polarizer (U-POT) (Fig.3)

1. Place the polarizer ① into the filter holder of the microscope frame with the indices ② facing upward.
2. Place the polarizer so that the indices ② will be at the left and right side of the microscope frame.

4 SIMPLE POLARIZED LIGHT OBSERVATION

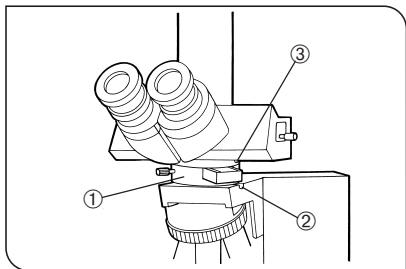


Fig. 4

Adjusting for Extinction

★ Remove the test plate or quarter wave plate from the light path.

1. Engage the fixed analyzer into the light path.
2. Confirm that the polarizer is placed in the filter holder of the microscope frame and that the indices are properly placed to the right and left side of the microscope frame.
3. Set the main switch of microscope frame to " I " (ON) and engage the 10X objective.

★ When using the swing-out achromat condenser U-SC3, swing out the top lens.

4. Keeping the simple polarizing intermediate attachment (U-KPA) ① stationary, loosen the observation tube clamping screw ②. Rotate the U-KPA slightly until complete extinction is obtained. At this point, tighten the clamping screw. (Fig.4)

★ If this adjustment moves the binocular eyepieces away from the front, loosen the U-KPA's observation tube clamping screw ③ and re-adjust the position of the observation tube. (Fig.4)

© Further fine adjustment for extinction is performed by rotating the polarizer (U-POT).

Orthoscopic Observation

- © In principle, polarized light enters the light path, parallel to the optical axis, to enable observation of the optical characteristics of the specimen. Therefore, if the U-SC3 condenser is used, swing out the top lens of the condenser. When using another type of condenser, stop down the NA to approximately 0.25. Use 4X to 100X objectives.
1. At the position of complete extinction, the polarizing characteristics of the specimen can be investigated by rotating the stage to turn the specimen.
- © Using the rotatable stage U-SRG makes it easy to turn the specimen.
2. Using a test plate (U-TP530, U-TP137), the changes in the interference color becomes visible.
 3. For observation with no extinction, remove the analyzer from the light path.

MEMO

This product is manufactured by **EVIDENT CORPORATION** effective as of Apr. 1, 2022.
Please contact our "Service Center" through the following website for any inquiries or issues related to this product.

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