

User Manual

Dark Field Kit

Model A191



[MicroscopeNet.com](http://MicroscopeNet.com)

## i Caution

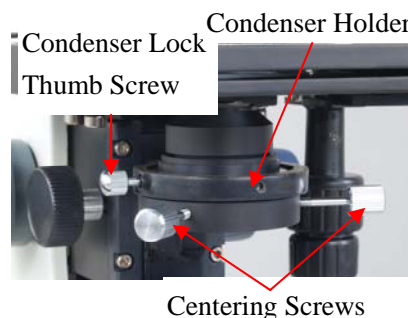
1. Keep the dark field kit out of direct sunlight, high temperature or humidity, and dusty environments. Ensure that the microscope is located on a smooth, level and firm surface.
2. Do not attempt to disassemble any components.
3. Keep the kit clean; remove dirt and debris regularly. Accumulated dirt on outer surfaces should be cleaned with a damp cloth. More persistent dirt should be removed using a mild soap solution. **Do not use organic solvents for cleansing.**
4. The outer surface of the optics should be inspected and cleaned periodically using an air stream from an air bulb. If dirt remains on the optical surface, use a soft cloth or cotton swab dampened with a lens cleaning solution (available at the camera stores). All optical lenses should be swabbed using a circular motion. A small amount of absorbent cotton wound on the end of a tapered stick makes a useful tool for cleaning recessed optical surfaces. Avoid using an excessive amount of solvents as this may cause problems with optical coatings or cemented optics or the flowing solvent may pick up grease making cleaning more difficult.
5. Store the instrument in a cool, dry environment. Put the kit back to the storage box when not in use.

## 1. Parts Illustration



## 2. Mounting the darkfield condenser

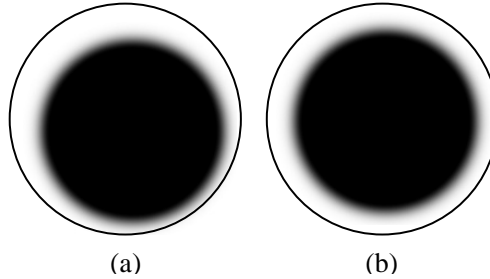
- Loosen the condenser lock thumb screw on the condenser holder and remove the condenser.
- Install the darkfield condenser and tighten the condenser lock thumb screw on the condenser holder.



### 3. Operation

#### 1) Centering the dry darkfield condenser

- Turn the 4X objective to the light path.
- Turn the condenser focus knob to lower the condenser till a dark spot showed in the viewing field as shown in the figure (a).
- Turn the condenser translational centering screws to move the dark spot to the center as shown in the figure (b).



2) Place the slide on the stage.

3) Raise the condenser all the way to the top and lower it a little bit.

4) Following the procedures in the instruction manual of microscope to focus and observe.

5) Move the condenser up or down slightly to get the best darkfield viewing.

**Note:**

- The dry darkfield condenser is used with the dry objectives only.
- The dry darkfield condenser works with the 4X, 10X, 40X objectives.
- The dry darkfield condenser won't work with the 100X oil immersion objective.

### 4. Specifications

Model	A191
NA	0.7 – 0.9
Mounting Size	37 mm in diameter