

## Specifications

**Nosepiece**  
Reverse quintuple nosepiece  
Multiple ball bearing mounted

**Head**  
Diopter adjustment +/-5  
Inclined 30°  
10X/20X Super WF HP eyepieces;  
numbered cross scale  
Focusable eyepiece with numbered cross  
scale reticle  
Interpupillary distance range 50-75mm

**Illumination**  
Moveable Abbe condenser, NA 1.25  
Iris Diaphragm  
6V/20W Clear Halogen illumination  
Variable light adjustment: 0-20W output  
90-240V / 50-60Hz automatic-switching  
power cord

**Stage**  
Center-adjustable stage (153mm diameter)  
360 degree rotation; 1 degree increments  
Center adjustable  
Tension control knob  
Slide clips (mechanical add-on available)

**Focus**  
Coarse adjustment: range of 22mm  
Fine adjustment: graduation of 2µm  
Tension control knob

**Objectives**  
Infinity Plan objectives  
4x, 10x, 20x, 40x  
60x dry available  
Anti-fungal, parfocal, parcentric, color-coded

**Analyzer & Accessories**  
Uric Acid Control slide  
Polarizing analyzer with 360 degree increments  
Red Compensator lens (λ); (λ/4) lens;  
Quartz Wedge Bertrand lens

**Dimensions and Weight**  
Height: 15.6" (396 mm)  
Length: 16.5" (420 mm)  
Width: 8.1" (206 mm)  
Weight: Trinoc: 20.5 lbs.  
Binoc: 20.0 lbs.

Objectives: The following numbers are based on use with 10x/20 eyepieces.

Size	N.A.	Mag.	Field of View	Working Distance
4X	0.10	40X	5.0mm	6.73mm
10X	0.25	100X	2.0mm	4.19mm
20X	0.40	200X	1.0mm	2.14mm
40XR	0.65	400X	0.5mm	.45mm
50XR	0.95	500X	0.4mm	.29mm
60XR	0.85	600X	0.33mm	.21mm
100XR	1.25	1000X	0.2mm	.12mm

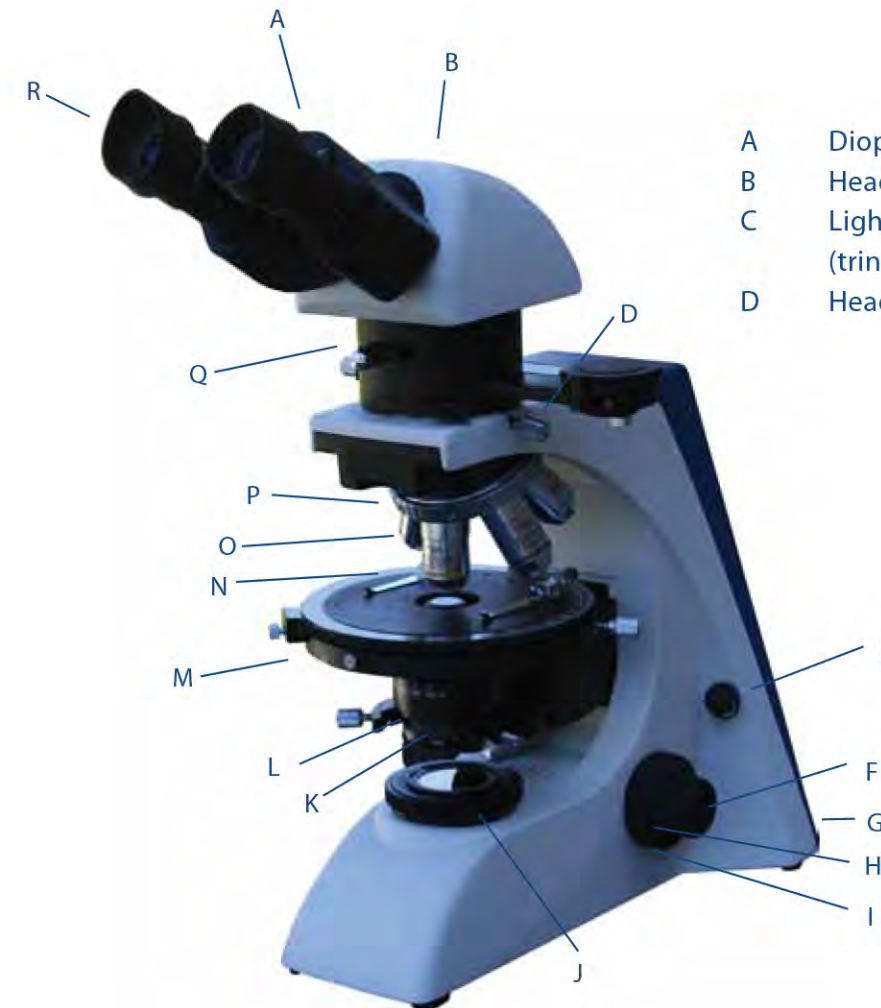


# Mi5 Polarizer



Model pictured:  
Mi5 Polarizer

Not all features available on all models -  
see back page for model specifications.



- |   |                                   |   |  |
|---|-----------------------------------|---|--|
| A | Diopter Adjustment                | E | Brightness Control                         |
| B | Head                              | F | Fine Focus                                 |
| C | Light Port Slide<br>(trinoc only) | G | On/Off Switch<br>(located on rear)         |
| D | Head Retention Screw              | H | Coarse Focus                               |
|   |                                   | I | Focus Friction Control<br>(left side only) |
|   |                                   | J | Base Condenser                             |
|   |                                   | K | Substage Abbe Condenser                    |
|   |                                   | L | Substage Iris Diaphragm                    |
|   |                                   | M | Stage                                      |
|   |                                   | N | Slide Holder                               |
|   |                                   | O | Objectives                                 |
|   |                                   | P | Nosepiece                                  |
|   |                                   | Q | Analyzer Module                            |
|   |                                   | R | Eyepieces                                  |

Recommended  
Upgrades:



Phase and Dark Field



Reticles



50x oil and 60x dry  
objectives



Camera Attachments

## Unpacking and Setup

LW Scientific packs each Mi5 Microscope with utmost care. Examine the outer and inner containers for any visual damage. Retain all of the packing material until you have examined and tested your new microscope. If there is damage, please contact the shipping company, as our warranty does not cover shipping damage. If you are uncertain who the shipper is, contact the distributor where you purchased the microscope. Please retain all

packaging material for future use. Carefully unpack your Mi5 Microscope using the following checklist for all the parts and accessories:

- Box 1: Head of microscope
- Box 2: All accessories for scopes
- Box 3: Base of microscope & objectives

## Unpacking

Remove all 3 small boxes from the large box and set on a firm work area.

- 1 Open Box # 3 and take out microscope base. Set on table/bench. Carefully remove all Styrofoam, zip ties from stage (if applicable), and tissue paper and finally, any applicable stickers from stage. Next, pull out the (4) objectives and the (2) eyepieces from the top Styrofoam container--set them on the table (these will be used in the microscope assembly steps).



- 2 Open Box # 1 labeled: Binoc/Trinoc Head. Open the box and carefully open plastic bag with the microscope head in it and set it aside. Next, remove the eyepiece caps and tissue from the bottom of the binoc/trinoc head.



- 3 Open Box #2 labeled: Analyzer Module and Accessories. Carefully remove items from foam/bubble wrap packaging and set the analyzer module next to the microscope base and binoc/trinoc head. You should now have the basic 3 components to assemble your microscope.



## Maintenance

- 1 Always cover your microscope with the dust cover when not in use. When cleaning the lenses, use lens paper or a cotton swab dipped in lens cleaning solution.
- 2 Excess oil should be cleaned off your 100x objective and stage at once. An alcohol pad is best for removing oil from the stage and on the other metal parts, but is not recommended for use on the lenses. Use lens cleaning solution and lens paper to clean off your objectives.
- 3 Dust in the nosepiece or ocular tubes should be blown out using filtered air. Canned air dusters work well for this job.
- 4 Whenever you remove an objective, we recommend that you place it back into the original plastic shipping vial until ready to be placed back on the microscope. **SCREW THE OBJECTIVE SECURELY INTO THE CAP OF THE HOLDER - DO NOT DROP OBJECTIVE LOOSELY INTO CONTAINER.**
- 5 To keep your microscope in top condition for years, LW Scientific recommends that you have the microscope professionally serviced once a year.  
Warning: The 40x and 60x objective is not sealed for oil immersion. Damage to the 40x and 60x objective due to oil immersion is not covered under warranty.

## Uric Slides

Uric acid is created when the body breaks down purine nucleotides. High concentrations of uric acid in blood serum can lead to a type of arthritis known as gout. In gout patients, crystals typically deposit in joint fluids (synovial fluid), which cause pain and swelling of the affected joint. The crystals are reviewed and identified using polarized microscopy. The forms may vary from rectangular to needle shape crystals.

The crystals seen in the enclosed preparation are prepared from uric acid. The slide contains mostly the rectangular forms with some needle shapes. This slide makes an ideal control for utilizing polarizing microscopy. There is no expiration date on these slides.

