



## NATIONAL MODELS 446, 447 & 448 STEREO MICROSCOPE – INCLINED HEAD – DUAL MAGNIFICATION

---

*See illustration on page 3.*

All the quality features and versatility of larger stereo microscopes, in a compact size that is more efficient for many uses. Choose low or high magnification simply by turning the objective turret. Viewing head is 45 degrees inclined and rotates 360 degrees so that user can position microscope conveniently in forward or reverse viewing position. Post mount permits head to be adjusted up or down to accommodate larger objects on stage.

### OPTICAL SYSTEM

- Paired widefield eyepieces with diopter adjustment on left side. Interpupillary adjustment from 55mm to 75mm. Reticle holder/retainer accepts eyepiece reticle with 23mm O.D..
- Paired objectives are parfocalled, parcentered, achromatic.
- Magnification changed by rotating objective turret 90 degrees, to positive click stop.
- Working distance: 75mm. Maximum specimen height on stage, 35mm
- Head rotates 360 degrees to permit reverse head position viewing.

### ILLUMINATION

- High intensity 12v 10 watt incidental and transmitted illumination is built-in.
- Separate base mounted switches control power on/off, top and bottom lights, permit use of top light only, bottom light only, top and bottom lights together.

### FOCUSING

- Rack & pinion focusing has slip clutch to protect mechanism against over-turning, and special tension adjustment.

### STAGE

- Supplied with two 80mm stage plates, one frosted glass and one plastic black/white reversible contrast. Two locked-on stage clips.

### FRAME

- Rugged cast metal frame, gray enamel finish.
- Height: 310mm (12-1/4 in.) extends to 370mm (14-3/4 in.) for larger objects.
- Base width: 115mm (4-1/2 in.), Base depth: 197mm (7-3/4 in.)
- Net wt. 2.5 kgs (5.5 lbs)

### PACKING

- Molded styrofoam container with instruction brochure, vinyl dustcover & rubber eyeshields.
- Individual: Ship wt. 4.1 kgs (9 lbs), Dimensions 400x425x275mm (16x17x11 in.)
- Master carton pack 4 each: Ship wt. 15 kgs (33 lbs), Dimensions 725x375x325mm (29x15x13 in.)

### WARRANTY

- Lifetime limited warranty, excluding bulbs, cord, and fuse.

**NOTE:** To order with 220v electrical system, add –220V to end of model number.

*Continued on page 2*

**Specification Chart**

Model	Objective	Eyepiece				Working Distance	Maximum Specimen Height
		WF10X (supplied)		WF15X (optional)			
		Total Magnification	Field Size	Total Magnification	Field Size		
446	1X	10X	20mm	15X	13mm	75mm	60mm
	3X	30X	6.7mm	45X	4.3mm		
447	2X	20X	10mm	30X	6.5mm	75mm	60mm
	4X	40X	5mm	60X	3.2mm		
448	1X	10X	20mm	15X	13mm	75mm	60mm
	2X	20X	10mm	30X	6.5mm		

**PARTS & ACCESSORIES:**

- 600-400 Eyepiece shields, rubber, pair
- 605-400 WF5x eyepieces, paired (note: permit only 60mm-84mm I.P.D.)
- 610-400 WF10x eyepieces, paired
- 615-400 WF15x eyepieces, paired
- 620-400 WF20x eyepieces, paired
- 800-400 Replacement bulb, 12v 10 watt, tubular
- 801-050 Replacement fuse for 220v version, 0.5 amp
- 801-100 Replacement fuse for 110v version, 1.0 amp
- 940-410 Frosted glass stage plate, 80mm
- 941-410 Black/white reversible plastic stage plate, 80mm
- 951 Vinyl dustcover, 16" tall x 13"
- 965-400-05 Eyepiece reticle, 5mm/100 div., 23mm O.D.
- 965-400-10 Eyepiece reticle, 10mm/100 div., 23mm O.D.
- 970-400 Stage clip for stereo microscope, 75mm from post, each

**Distributed by:**



Sales: 888-777-8835 • Email: sales@m-depot.com

Main: 209-839-2990 • Fax: 888-872-4300

<http://www.microscope-depot.com>



NATIONAL MODEL 446TBL-10 1X & 3X  
447TBL-10 2X & 4X  
448TBL-10 1x & 2x