



NATIONAL

National Optical & Scientific Instruments, Inc.
A Member of the Motic Group

450 SERIES Stereo Microscope with Inclined Head and Dual Magnification

All the quality features and versatility of larger stereo models, in a compact size only 12" tall. Ideal size for elementary and middle school, rugged enough for high school. Upright, unreversed image is designed for viewing 3-dimensional objects, dissecting. Choose low magnification for a wide field of view, then high magnification for close-up detail.

OPTICAL SYSTEM

- Paired widefield 10x eyepieces, left-side diopter adjustment, interpupillary adjustment from 55mm to 75mm.
- Eyepieces equipped with reticle holder/retainer to accept reticle with 23mm O.D.
- Fixed head.
- Paired objectives are parfocalled, parcentered and achromatic.
- Magnification changed by rotating objective turret 90° to positive click stops.

ILLUMINATION

- 4-position light control: top only/bottom only/top & bottom/off.
- Top light (incidental) and Bottom light (transmitted) corded 12v 10 watt tungsten illumination (Models 452TBL-10, 452TBL-10).
- Top light (incidental) and Bottom light (transmitted) cordless LED illumination (Models 452TBL-10LED, 453TBL-10LED)
- 8 hour charge provides up to 50 hours of use (Cordless LED models)

BASE

- Rack & pinion focusing with slip clutch and tension adjustment.
- Includes two 80mm stage plates: frosted glass and reversible black/white plastic contrast plate.
- Two locked-on stage clips.

WARRANTY

- 5 year limited lifetime limited warranty, excluding bulbs, cord, and fuse.



452TBL-10LED

National 450 Series

Specifications	
Eyepiece	10x, 20mm (15x, 20mm models 452TBL-15, 452TBL-15-LED, 453TBL-15, 453TBL-15-LED)
Head	Fixed 45° inclined head
Stage	80mm, frosted glass, reversible black & white
Magnification Options	1x , 3x (Models 452TBL-10, 452TBL-10-LED, 452TBL-15, 452TBL-15-LED) 2x, 4x (Models 453TBL-10, 453TBL-10-LED, 453TBL-15, 453TBL-15-LED)
Maximum Specimen Height	35mm
Working Distance	75mm
Top Illumination	12v 10w tungsten (Corded models), LED (Cordless Models)
Bottom Illumination	12v 10w tungsten (Corded models), LED (Cordless Models)
Height/ Weight	12 1/4 in. (310mm)/ 5.5 lbs (2.5 kgs)

PACKING:

- Individual: Ship wt. 9 lbs (4.1 kgs), Dimensions 16x17x11 in. (400x425x275mm)
- Master carton pack 4 each: Ship wt. 32 lbs (14.5 kgs), Dimensions 24x14x16 in. (600x350x400mm)

Parts and Accessories	
605-400	WF5x eyepieces, paired
615-400	WF15x eyepieces, paired
620-400	WF20x eyepieces, paired



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Authorized Distributor

Products subject to changes in material and design, equal to or exceeding those described above.

ISO 9001:2000 Certified
ISO 14001:2001 Certified