



NATIONAL

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

MODELS 211, 212

Monocular Compound
Microscope

A new standard of precision optics, highly engineered mechanics and very rugged construction, all at little more cost than a budget microscope. Objective turret (nosepiece) is in reverse position to permit easier changing and positioning of specimen slides. Preferred by teachers, the corded LED illumination system provides optimum image brightness, virtually no bulb heat and has a 50,000-hour rated bulb life.

OPTICAL SYSTEM

- Widefield 10x eyepiece with pointer. Accepts optional #965-160 eyepiece reticle.
- 45° inclined monocular viewing head rotates 360° for easy sharing by more than one student.
- DIN standard 4x (0.10 N.A.), 10x (0.25 N.A.) and 40xR (0.65 N.A.) objectives are supplied for 40x, 100x and 400x magnification. Model 212 also includes 100xR (1.25 N.A.) oil immersion lens for 1000x magnification. All are achromatic, parfocalled, parcentered and color-coded.
- 4-hole objective turret, reverse position, ball-bearing mounted for smooth, precise changes in magnification.

ILLUMINATION

- Built-in corded LED illumination, delivers greater light and longer life than standard 20-watt tungsten bulb. Virtually no base heat. 50,000 hour rated bulb.
- Base mounted on/off switch, heavy-duty 3-wire grounded electrical system and plug.
- 0.5A time delay fuse.

FOCUSING

- Separate low position coarse and fine focusing controls.
- Slip clutch prevents damage to focusing system.
- Tension adjustment eliminates stage drift.
- Safety rack stop prevents damage to slides and objective lenses.

WARRANTY

- Limited lifetime warranty, excluding bulb, fuse, and cord.



National Models 211, 212

Specifications	
Eyepiece	10x, 18mm, with pointer
Head	45° inclined monocular viewing head, rotates 360°
Nosepiece	4-hole, click stop, reverse angle, ball-bearing mounted
Objectives	DIN, achromat, 4x, 10x and 40xR (Model 212 adds 100xR)
Stage	142mm x 142mm stage, mechanical stage with low-position coaxial x-y controls
Condenser	1.25 N.A. Abbe condenser with spiral focusing mount and iris diaphragm
Focusing	Separate coarse and fine controls with tension adjustment and slip clutch
Illumination	LED
Electrical	Input 110 Volts
Height/ Weight	15 in. (380mm)/ 10 lbs (4.6 kgs)

PACKING:

- Individual: Ship wt. 15 lbs (7 kgs), Dimensions 22x15x15 in. (550x375x375mm)
- Master carton pack 2 each: Ship wt. 30 lbs (13.6 kgs), Dimensions 19x15x21 in. (475x375x525mm)

Parts and Accessories	
800-001	Replacement LED bulb
801-160	Replacement fuse, 0.5A time delay
911	Graduated mechanical stage, side mount adjustments
965-160	Eyepiece reticle, 10mm/100 div.