

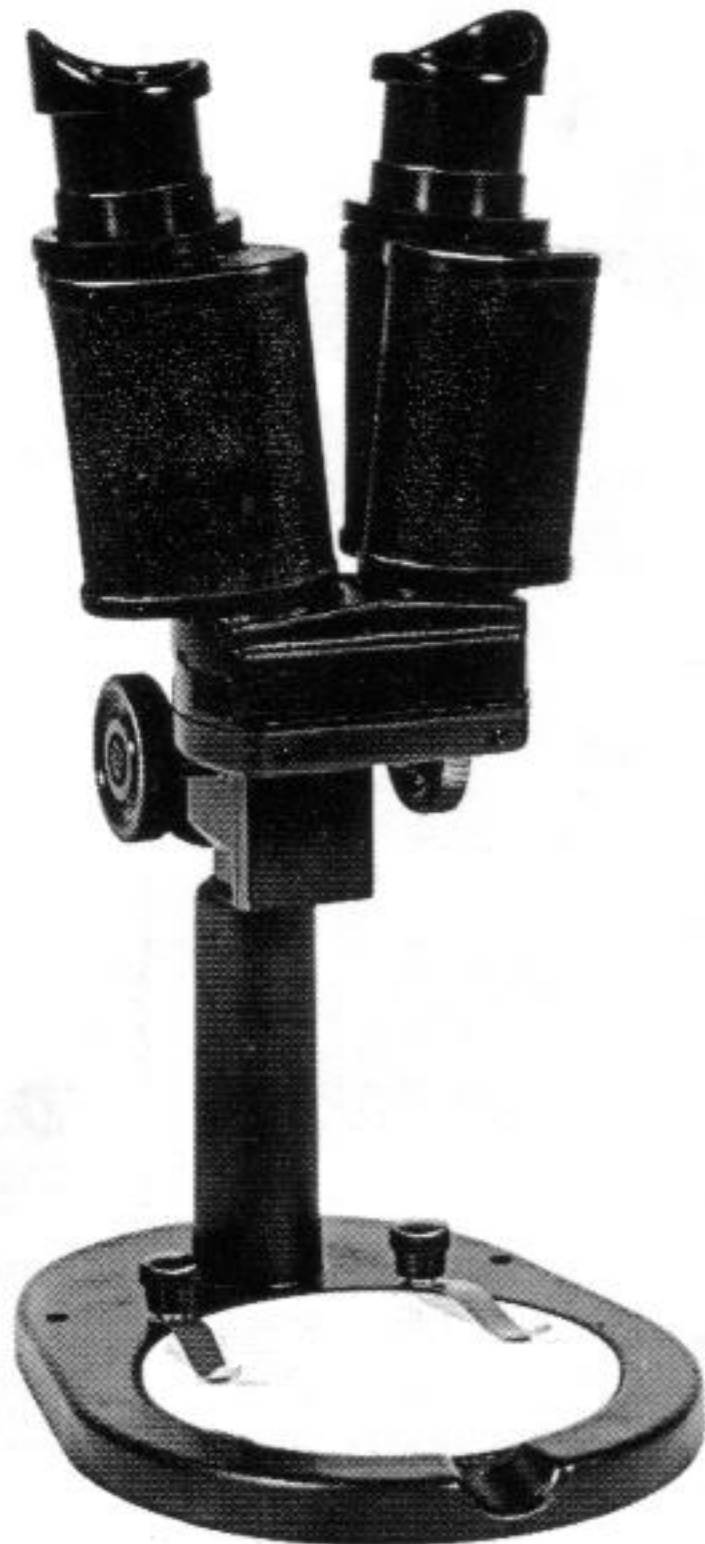
# Zenith

## MICROSCOPES & ACCESSORIES

### ZENITH BM-51-2 STEREOSCOPIC MICROSCOPE

Magnification x8.75.  
Field of view 25mm.  
Working Distance  
140mm.  
Sturdy Metal  
Construction.  
High Quality Optics.  
Black/White Reversible  
Stage Plate.  
Wide range of  
applications in Industry  
and Education.

**Especially suitable  
for Junior Science  
Education**



### ZENITH UNNAT-2 STUDENT ZOOM MICROSCOPE



Superbly constructed Student's  
microscope with excellent zoom  
facility.

Magnification range x80 -x400  
Achromatic Objectives x8,x20  
Single Zoom Eyepiece x10-x20  
Continuous Zoom from x80-x160  
and x200-x400.

Very reliable and simple to use,  
Strong Metal Construction,  
High Quality Optics, Locked  
on Stage Clips, Rotating Four  
Hole Disc Diaphragm,  
Safety Stop fitted to  
prevent slide damage,  
Large Concave Mirror.

**Highly recommended  
for GCSE use**



### ZENITH YM-301 EDUCATIONAL MICROSCOPE

Very popular School  
Microscope. Magnification  
Range x56 - x400.

Huyghenian Eyepieces  
x7, x10, x20.

Achromatic Objectives x8,x20.

Strong Metal Construction,

High Quality Optics,

Triple Nosepiece,

Rack & Pinion

Stage Focusing,

Safety Stop fitted to

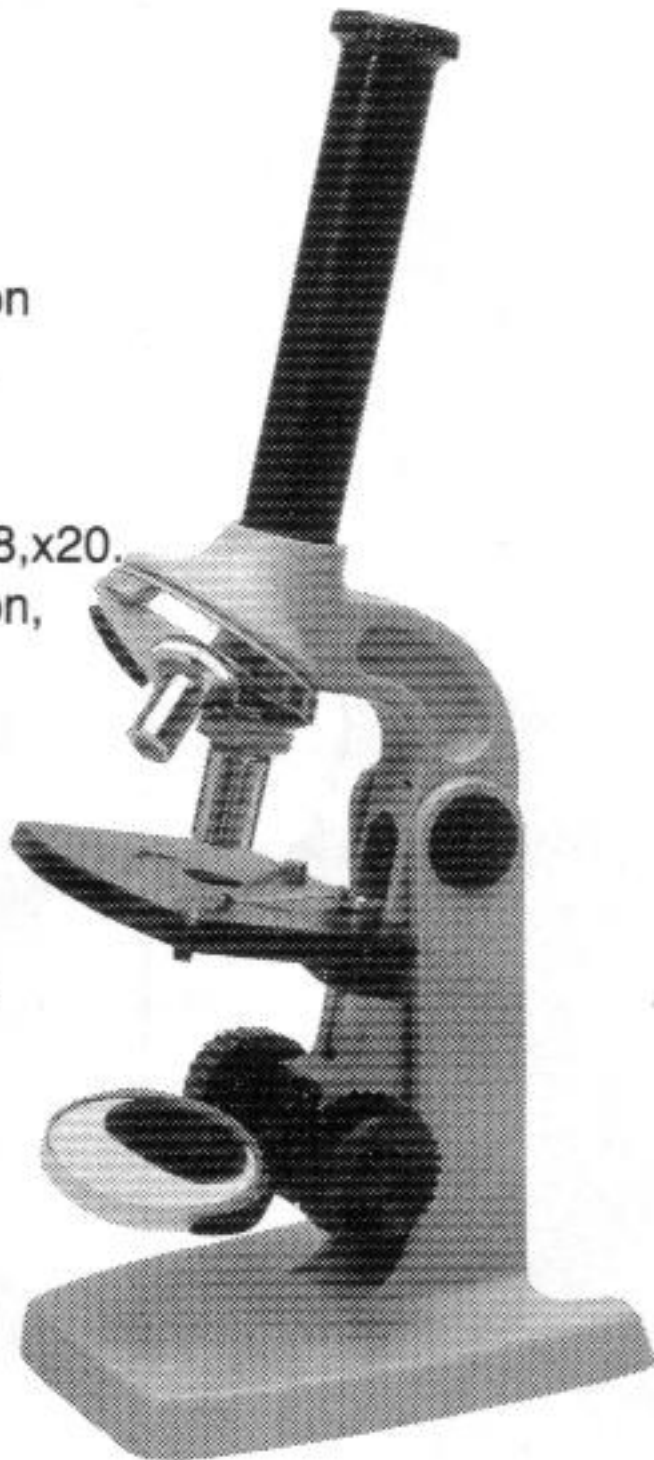
prevent damage to slide,

Locked on Stage Clips,

4 Hole Disc Diaphragm,

Large Concave Mirror.

**Highly recommended  
for GCSE use**



### ZENITH BIOLAM

A superb range of Biological  
Compound Microscopes  
from Russia.

Extremely durable in construction  
incorporating solid brass Focusing  
Slides (**not aluminium**) and fine quality  
Precision Ground Optics.

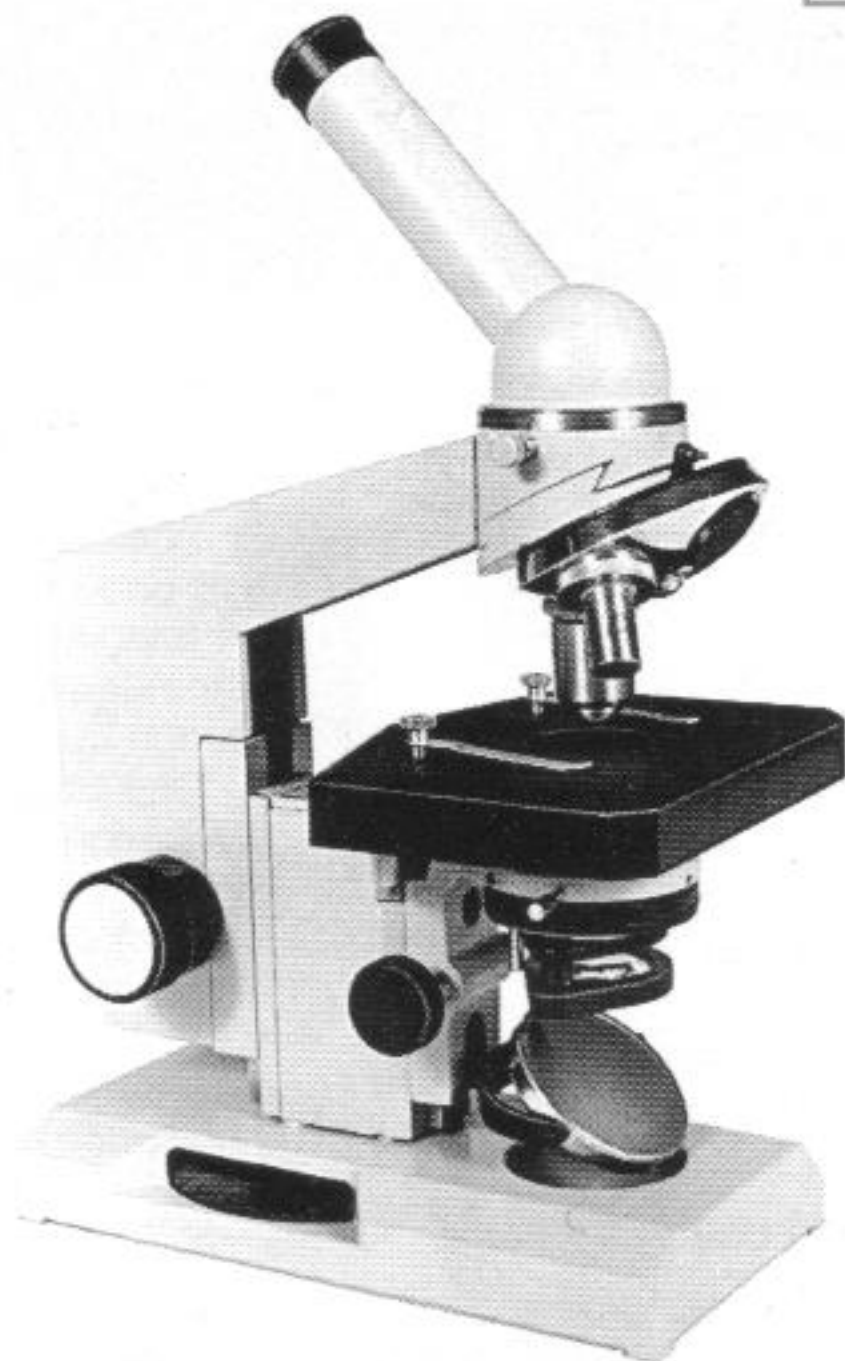
Renowned for their  
long life, high optical  
performance,  
reliability, and  
adaptability for use  
over a wide range  
of Educational,  
Industrial and  
Medical applications.  
Especially popular  
with the amateur  
Microscopist,  
offering true  
unbeatable  
value for money.

**(Please see inside  
Catalogue for further details).**

**Model illustrated: BIOLAM R-21**



# BIOLAM MICROSCOPES



## ZENITH BIOLAM S-20, S-21, BIOLOGICAL MICROSCOPES

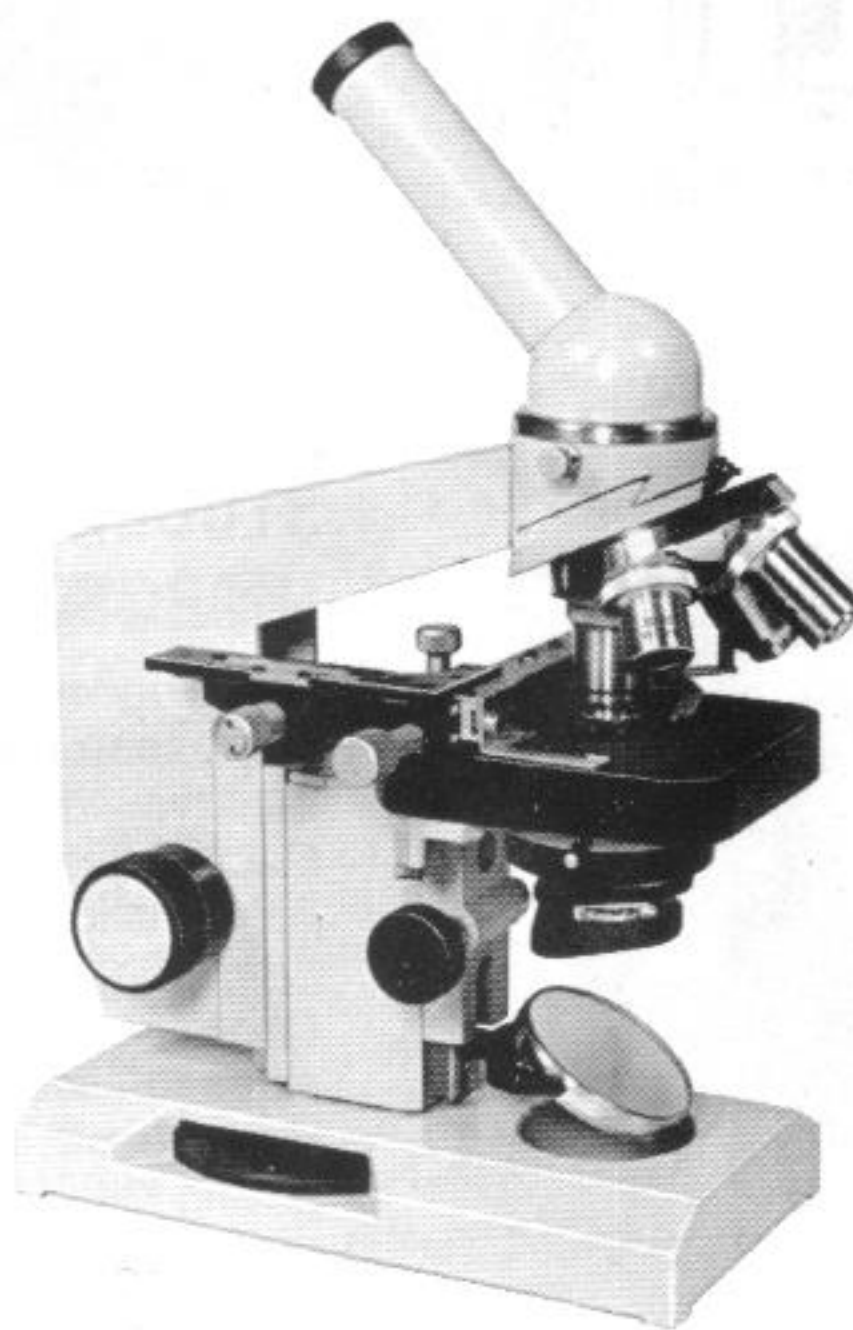
**BIOLAM S-20:** Magnification range x56-x600. Compensating Eyepieces x7, x15.

Parfocal Achromatic Objectives x8, x40R.

**BIOLAM S-21:** Magnification range x56-x600. Compensating Eyepieces x7, x10, x15.

Parfocal Achromatic Objectives x8, x20, x40R. (R = retractable)

Coarse & Fine focusing, Focusing Abbe Condenser (N.A.1-20) with Iris Diaphragm & Filter Carrier (2 filters supplied), Mono Head rotatable 360°, Quadruple Turret, Plano-concave Mirror (illuminator optional). Fitted with large non-corrosive square stage. Can be fitted with CT-12 mechanical stage. Supplied in high quality polished wooden carrying case.



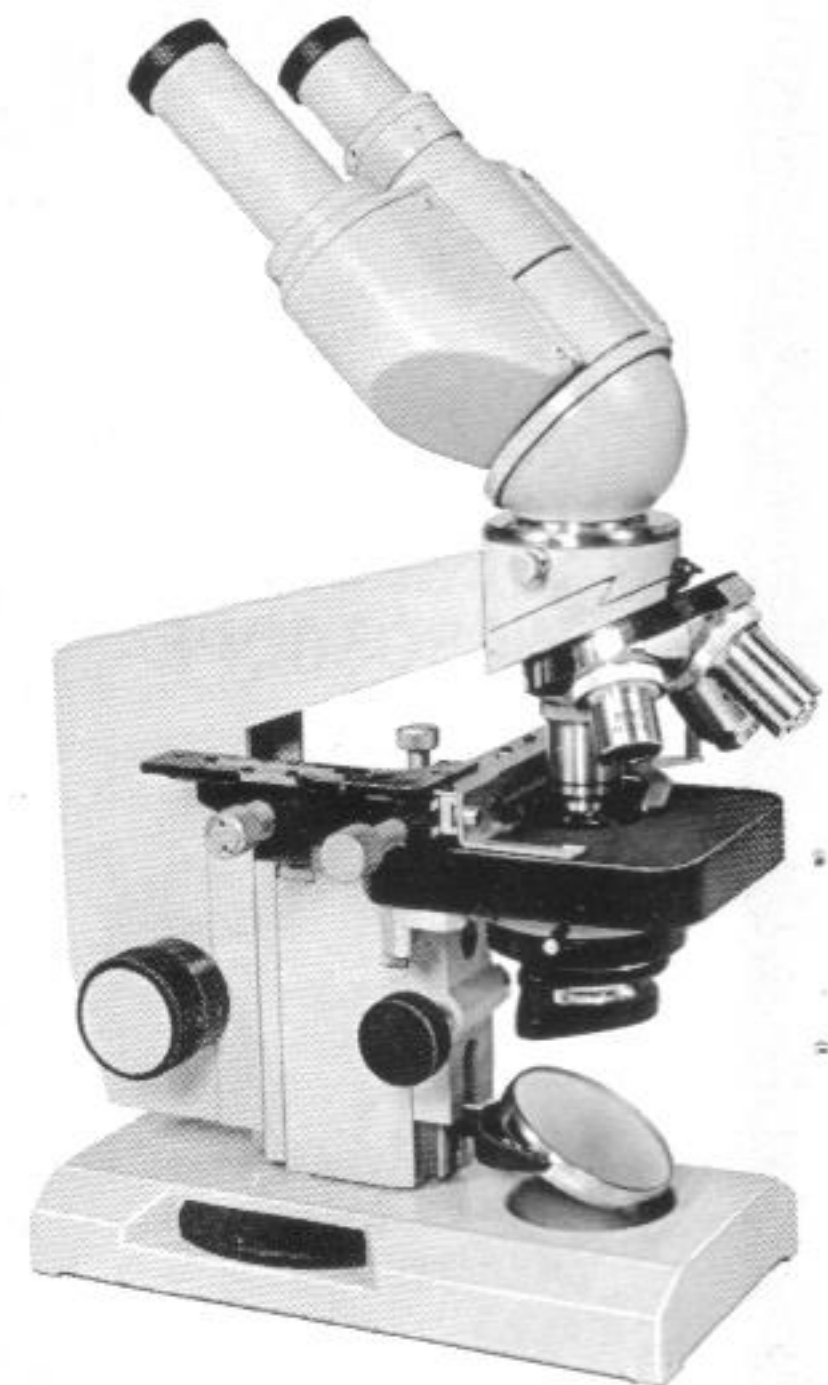
## ZENITH BIOLAM D-11 BIOLOGICAL FIELD MICROSCOPE

Magnification Range x63-x1350.

Compensating Eyepieces x7, x10, x15.

Parfocal Achromatic Objectives x9, x40 (water), x40R (dry), x90R (oil). (R= retractable)

Coarse & Fine focusing, Focusing Abbe Condenser (N.A.1-20) with Iris Diaphragm & Filter Carrier (2 filters supplied), Mono Head rotatable 360°, Quadruple Turret, Plano-concave Mirror (illuminator optional). Supplied with CT-12 mechanical stage. Packs neatly into strong metal carrying case for maximum portability.



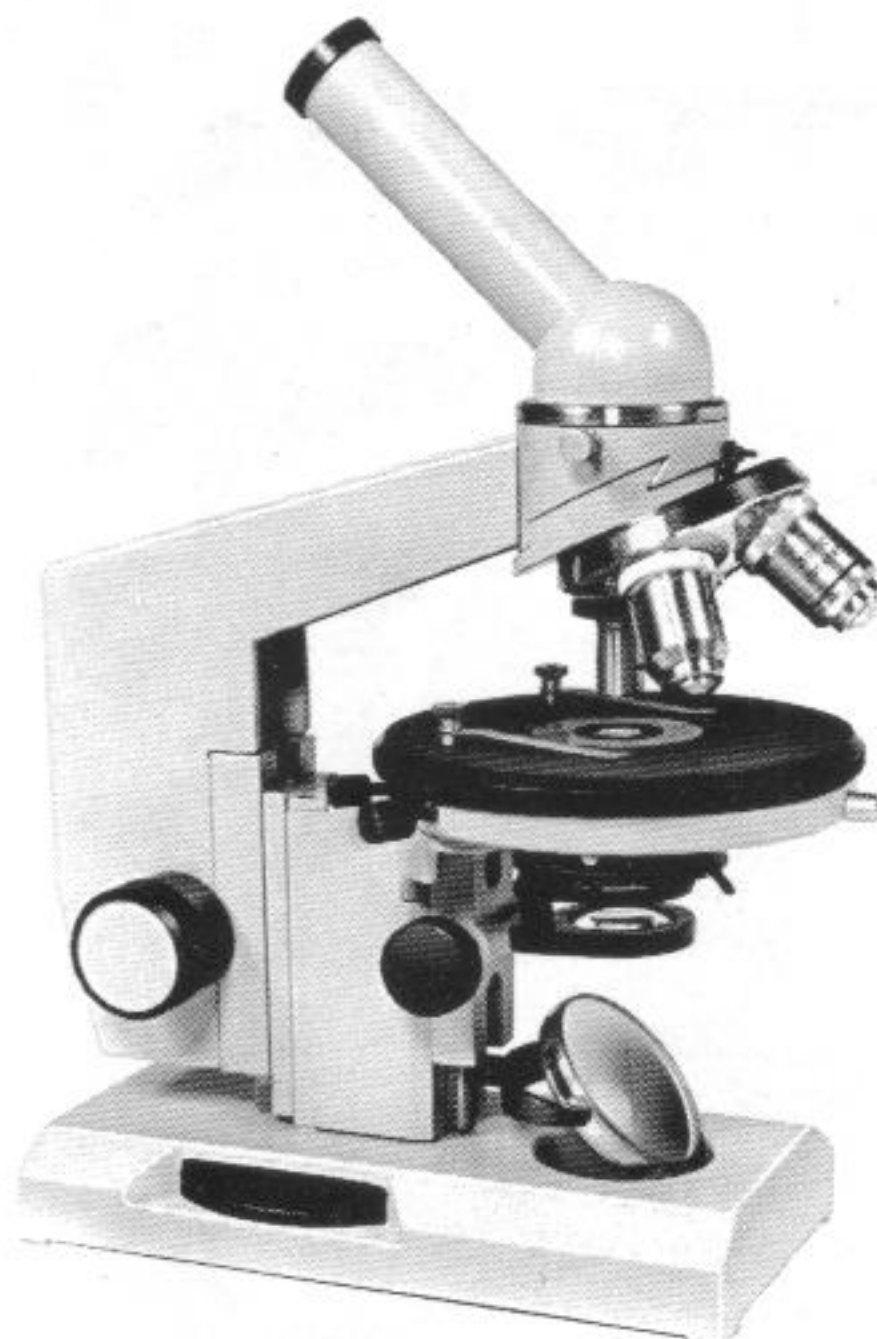
## ZENITH BIOLAM D-13 BIOLOGICAL FIELD MICROSCOPE

Magnification Range x84-x1350.

Compensating Eyepieces (paired) x7, x10.

Parfocal Achromatic Objectives x8, x20, x40R, x90R(oil). (R= retractable)

Coarse & Fine focusing, Focusing Abbe Condenser (N.A.1-20) with Iris Diaphragm & Filter Carrier (2 filters supplied), Bino Head rotatable 360°, Quadruple Turret, Plano-concave Mirror (illuminator optional). Fitted with large non-corrosive square stage. Supplied with CT-12 mechanical stage. Packs neatly into a strong metal carrying case for maximum portability.



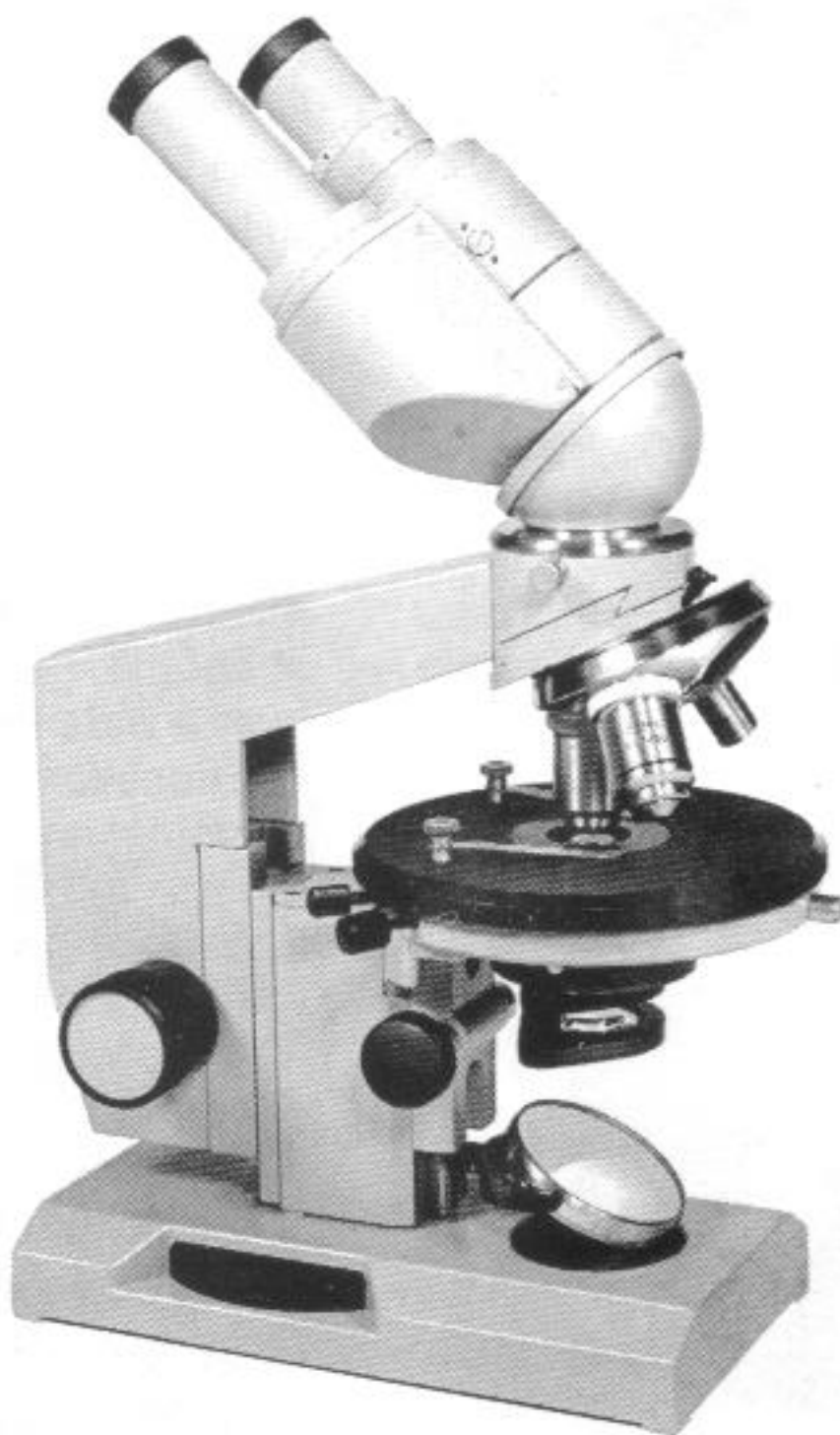
## ZENITH BIOLAM R-21 BIOLOGICAL MICROSCOPE

Magnification Range x56-x1350.

Compensating Eyepieces x7, x15.

Parfocal Achromatic Objectives x8, x40R, x90R (oil). (R= retractable)

Coarse & Fine focusing, Focusing Abbe Condenser (N.A.1-20) with Iris Diaphragm & Filter Carrier (2 filters supplied), Mono Head rotatable 360°, Quadruple Turret, Plano-concave Mirror (illuminator optional). Fitted with circular rotating stage with centring screws. Supplied in high quality polished wooden carrying case.



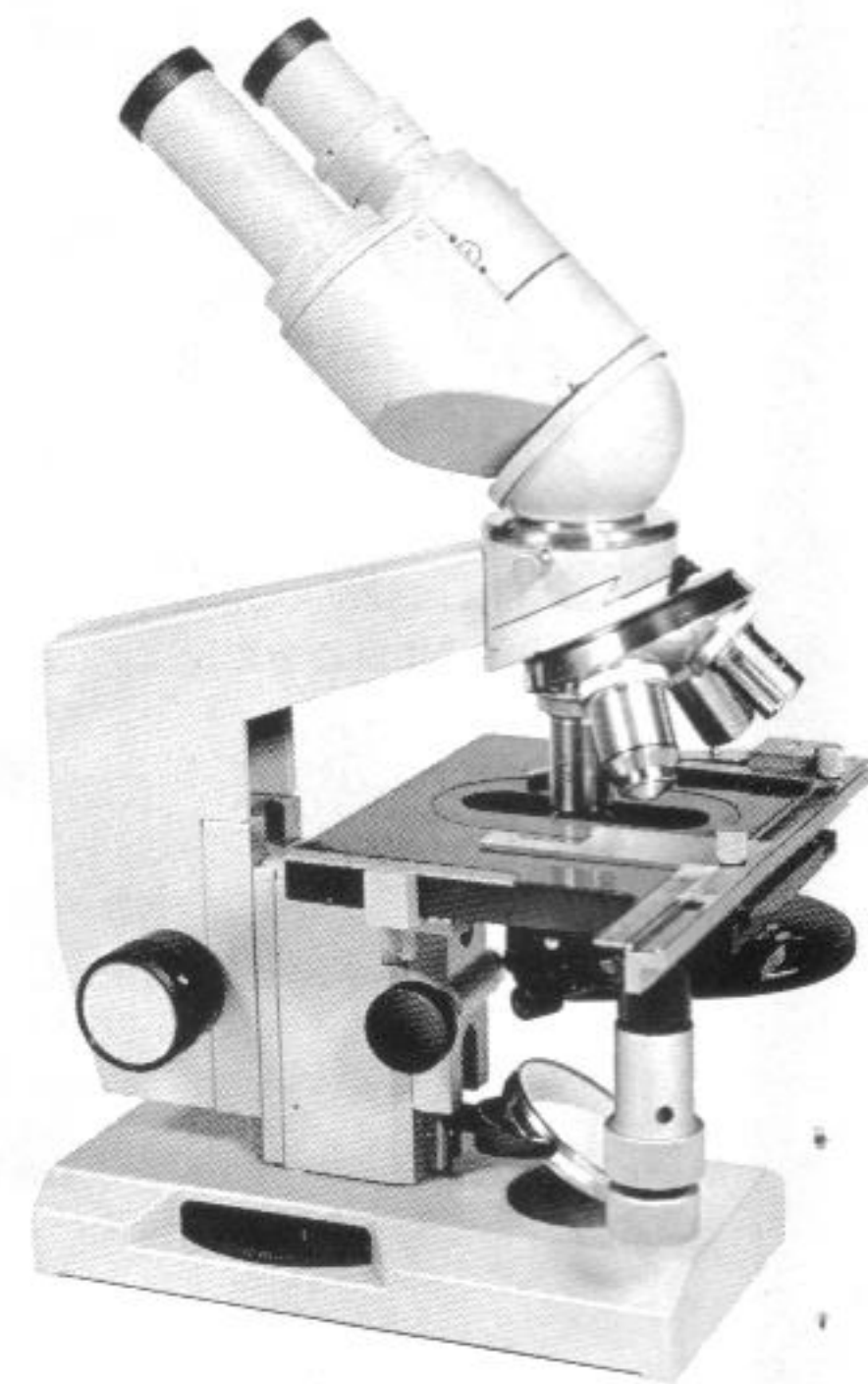
## ZENITH BIOLAM R-23 BINOCULAR BIOLOGICAL MICROSCOPE

Magnification Range x84-x1350.

Compensating Eyepieces (paired) x7, x10.

Parfocal Achromatic Objectives x8, x40R, x90R (oil). (R= retractable)

Coarse & Fine focusing, Focusing Abbe Condenser (N.A.1-20) with Iris Diaphragm & Filter Carrier (2 filters supplied), Bino Head rotatable 360°, Quadruple Turret, Plano-concave Mirror (illuminator optional). Fitted with circular rotating stage with centring screws. Supplied in high quality polished wooden carrying case.



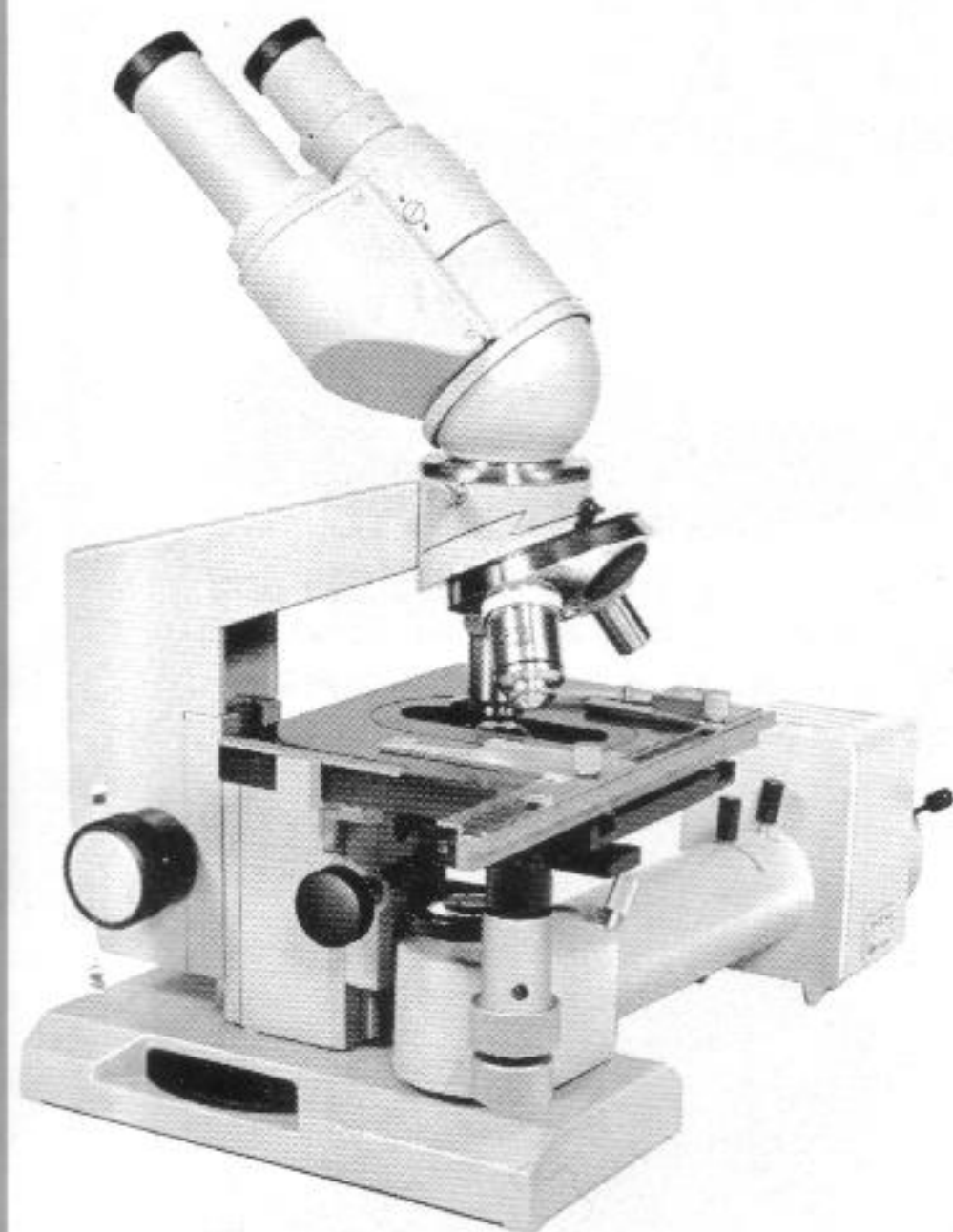
## ZENITH BIOLAM R-25 BINOCULAR BIOLOGICAL MICROSCOPE

Magnification Range x84-x1350.

Compensating Eyepieces (paired) x7, x10.

Parfocal Achromatic Objectives x8, x40R, x90R (oil). (R= retractable)

Coarse & Fine focusing, Focusing Abbe Condenser (N.A.1-20) with Iris Diaphragm & Filter Carrier (2 filters supplied), Bino Head rotatable 360°, Quadruple Turret, Plano-concave Mirror (illuminator optional). Features built-in mechanical stage with scales and verniers. Supplied in high quality polished wooden carrying case.

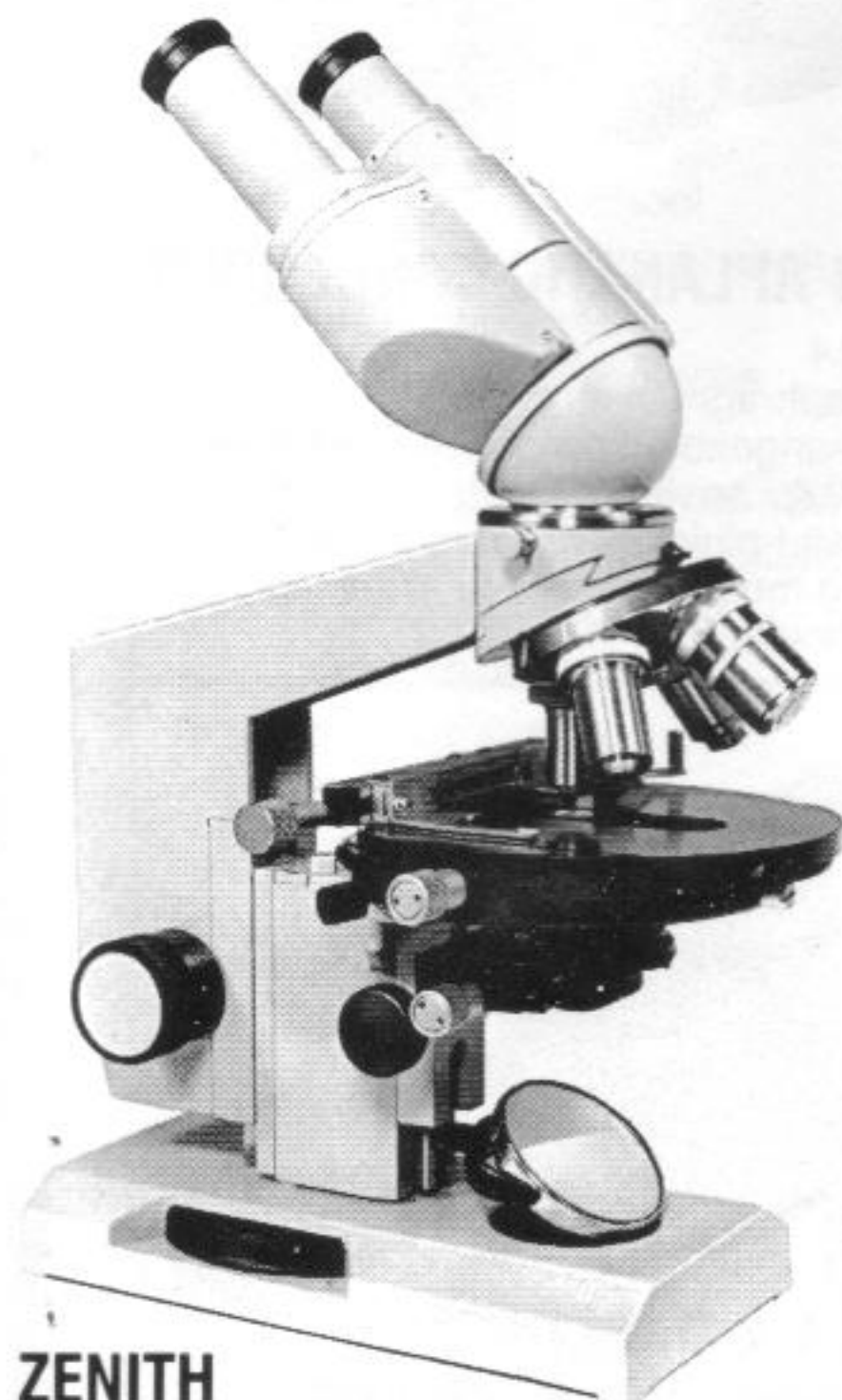


### ZENITH BIOLAM R26 BINOCULAR BIOLOGICAL MICROSCOPE

Of identical design and specification to the Biolam R25, but with the addition of a High-Intensity Lamp Unit, producing Kohler illumination.

Supplied with additional x7 Focusing Micrometer eyepiece with graticule. Complete with 8volt 20watt transformer and rheostat.

Supplied in high-quality polished wooden case.



### ZENITH BIOLAM R27 RESEARCH BIOLOGICAL MICROSCOPE

Magnification Range x75 - x1350, Compensating Eyepieces x5, x7, x10 (paired) plus single eyepieces x7 (measuring), x15, x20 (photographic). **Apochromatic objectives** x10, x20, x60 O.I., x90 O.I. Aplanatic Condenser 01-14. Circular, centring and rotating Mechanical Stage. Supplied in high quality polished wooden case.

Full details of this model available on request.

### ZENITH MBS-10 STEREOSCOPIC MICROSCOPE

For the examination of three-dimensional specimens by reflected or transmitted light. Magnifications x3.3-x100.8 Eyepieces supplied x6, x8, x14 (Paired) plus x8 micrometer eyepiece with measuring graticule. Left eyepiece tube is provided with a dioptric adjustment of  $\pm 5$  dioptries.



Constant working distance of 95mm. Field of view 2.4mm - 39mm. Supplied with 8volt 20watt transformer and rheostat. Polished wooden case.



### ZENITH METAM P-1 METALLURGICAL MICROSCOPE

Rotating Mechanical Stage (detachable). Polarizer/Analyser attachments. 8volt 20watt built-in illumination. Magnification range x50-x507. Eyepieces supplied x6.3, x10, x12.5, x16 (Paired). Plus x10 Micrometer eyepiece with scale Planachromatic objectives supplied x8, x12.5, x31.7. Epi-objective x31.7 (for Bright and Dark Field work). Supplied with specimen mounting press Transformer and rheostat.

Full details of this model available on request.

### MICROSCOPE OPTICS

EYEPIECES	Product Code
x5 Compensating	AM-12
x7 Compensating	AM-13
x10 Compensating	AM-14
x15 Compensating	AM-27
x7 Compensating with moveable pointer	PAM-13
x7 Focusing Micrometer with scale & crossline	ME-7

### OBJECTIVES ( Standard RMS )

x3.5 Planachromatic (N.A.O.10)	OM-3
x3.7 Achromatic (N.A.O.11)	OM-12
x8 Achromatic (N.A.O.20)	M-42
x9 Planachromatic (N.A.O.20)	OM-2
x20 Achromatic (N.A.O.40)	OM-27
x10 Phase Achromatic (N.A.O.30)	PH-10
x40 Achromatic (N.A.O.65)	OX-1
x40 W.I. Achromatic (N.A.O.75)	OM-23
X85 W.I. Achromatic (N.A.1.0)	OM-43
x90 O.I. Achromatic (N.A.1.25)	OM-41
x10 Apochromatic (N.A.O.30)	OM-18
x20 Apochromatic (N.A.O.65)	OM-21
x40 Apochromatic (N.A.O.95)	OM-16
x60 O.I. Apochromatic (N.A.O.8-1.0)	OM-15
x70 W.I. Apochromatic (N.A.1.23)	OM-25
x90 O.I. Apochromatic (N.A.1.30)	OM-20

### BIOLAM ACCESSORIES

#### PHASE-CONTRAST APPARATUS KF-4 AND KF-4S

For the examination of low contrast objects invisible through a microscope under normal conditions. Can be used with all Biolam Microscopes.

KF-4 objectives - x10, x20, x40, x90 O.I. Phase-Achromatic.

KF-4S objectives - x10, x40 Phase-Achromatic.

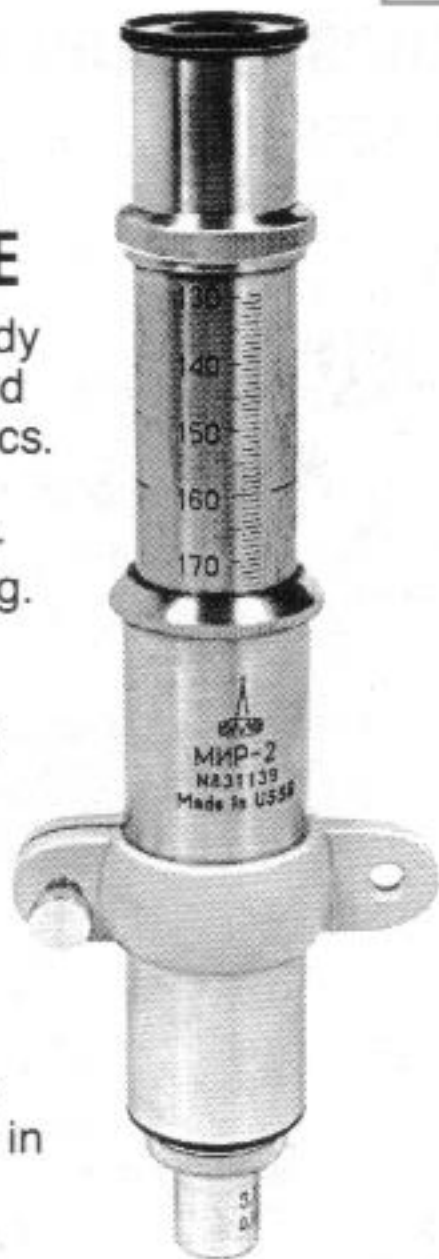
Both outfits are supplied with Phase Condenser, Centring Telescope and Green filter.



# BIOLAM ACCESSORIES

## MIR-3 MEASURING MICROSCOPE

A microscope body tube with standard R.M.S. fitting optics. Fitted with adjustable clamping and mounting. Designed for the measurement of small component parts etc. Supplied with Achromatic x3.7 objective. x7 Micrometer eyepiece. Measuring range 0.015mm to 6mm in length or separation.



## AY-12 BINOCULAR HEAD

Allows the observer to work under more natural conditions by using both eyes, thus reducing eye-fatigue. Supplied with matched pairs of Huyghenian eyepieces x7 and x10. Initial magnification of attachment is x1.5.



## OI-10 AND OI-13 DARK FIELD CONDENSERS

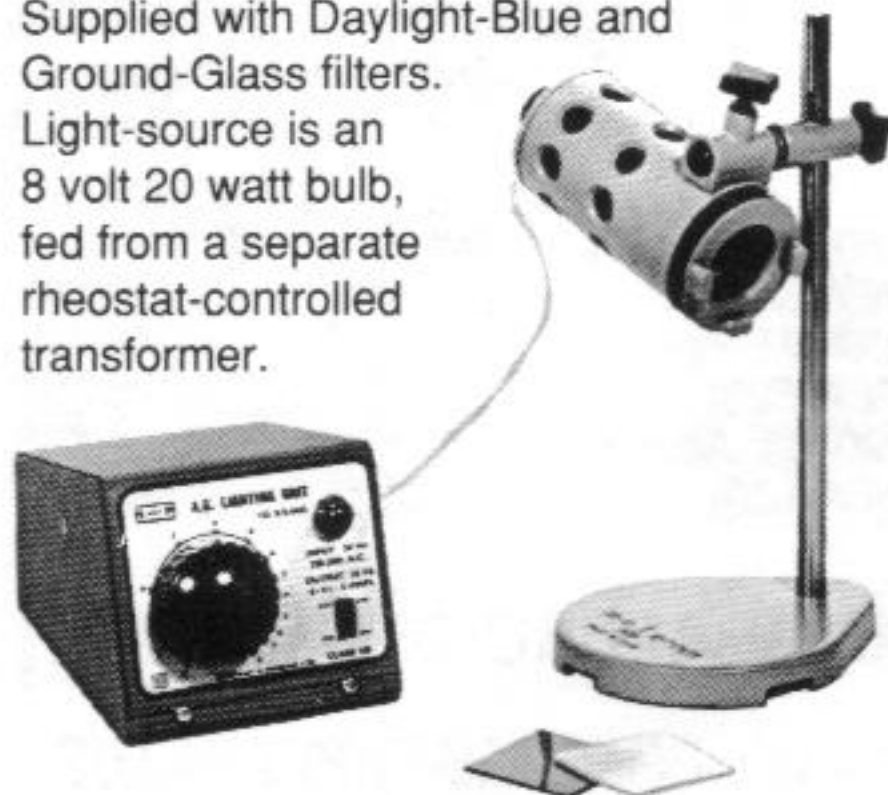
OI-10 is suitable only for Biolam R21 and R23, providing Bright and Dark Field illumination with low-power objectives. Fitted with filter-holder.



OI-13 may be used at all magnifications with the Biolam range of microscopes. Fitted with centring sub-stage mount and filter-holder.

## OI-19 HIGH INTENSITY LAMP

Suitable for all microscopes, giving a high level of illumination suitable for Phase-Contrast and Dark-Field techniques. The Lamp-House has a two-element lens, Iris Diaphragm and Filter Holder. Supplied with Daylight-Blue and Ground-Glass filters. Light-source is an 8 volt 20 watt bulb, fed from a separate rheostat-controlled transformer.



## SL-5 SUBSTAGE LAMP

May be fitted to all Biolam Biological microscopes in place of mirror. Uses 240volt 15watt bulb. Incorporates blue filter for accurate colour rendition.



## OI-14 APLANATIC CONDENSER

N.A. 1.4  
Iris Diaphragm.  
Interchangeable Low-power condenser (N.A. 0.3).  
Rack-and-pinion displacement and rotating mount for oblique illumination  
Filter holder.



## HLS-1 ATTACHABLE HALOGEN ILLUMINATED BASE

Designed to be easily fitted to the existing base-plate of all Biolam microscopes. It provides a high level of illumination, suitable for phase-contrast etc., by means of a 6volt, 20watt halogen bulb. Evenness of illumination is assured by a semi-ground condenser lens, and the level of illumination is controlled by a separate transformer/rheostat.

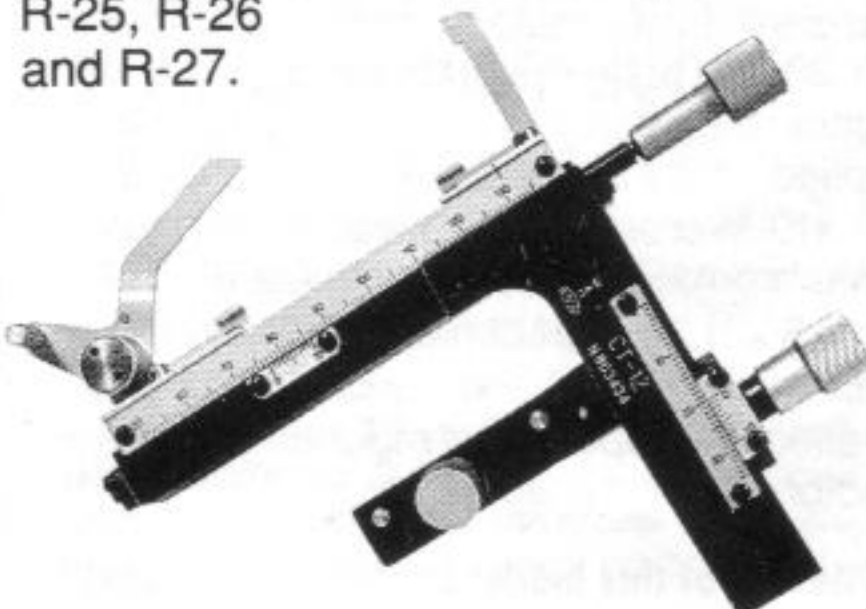


## CA-3 MICRO-CAMERA ADAPTOR

Enables the easy attachment of any camera having a 42mm Zenith or Praktica thread to all of the Biolam microscopes.

## CT-12 MECHANICAL STAGE

An attachment to effect the precise movement of a specimen on the microscope stage, both vertically and horizontally, and to measure the co-ordinates of objects being investigated.. Can be easily fitted to all Biolam Microscopes, except models R-25, R-26 and R-27.



## MOB-1 x 16 SCREW MICROMETER EYEPIECE

Provided with diagonal cross-lines made to traverse the field-of-view by means of a rotating drum, divided into a 100 parts. Each division represents 0.01mm displacement of lines. Index lines move across a scale of eight numbered divisions. Each represents a complete revolution of the drum. These are not intended for the purpose of direct measurement. Evaluation is made by comparison with a Stage-micrometer. (Product code SM-1 and SM-10)