

OLYMPUS

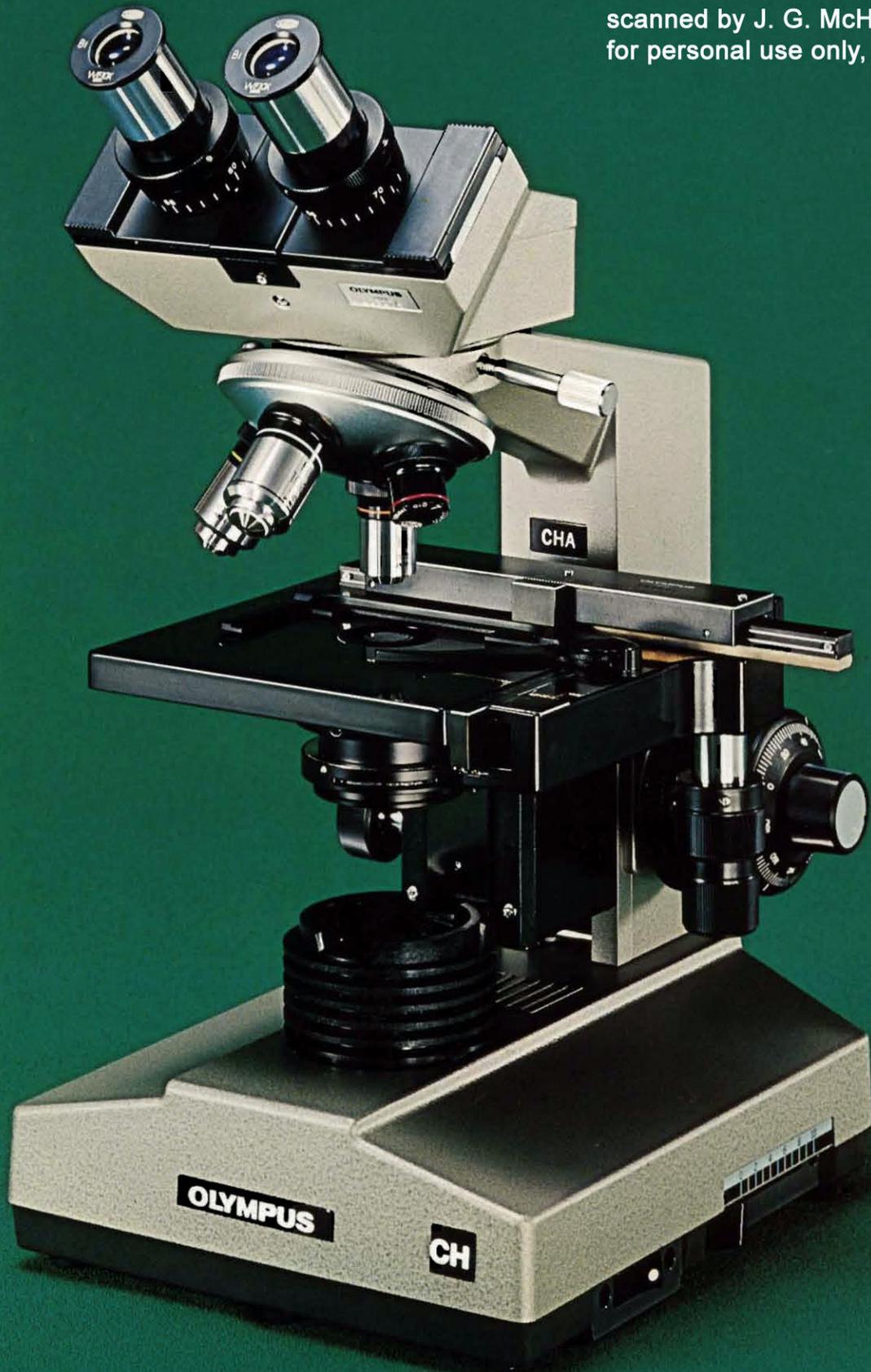


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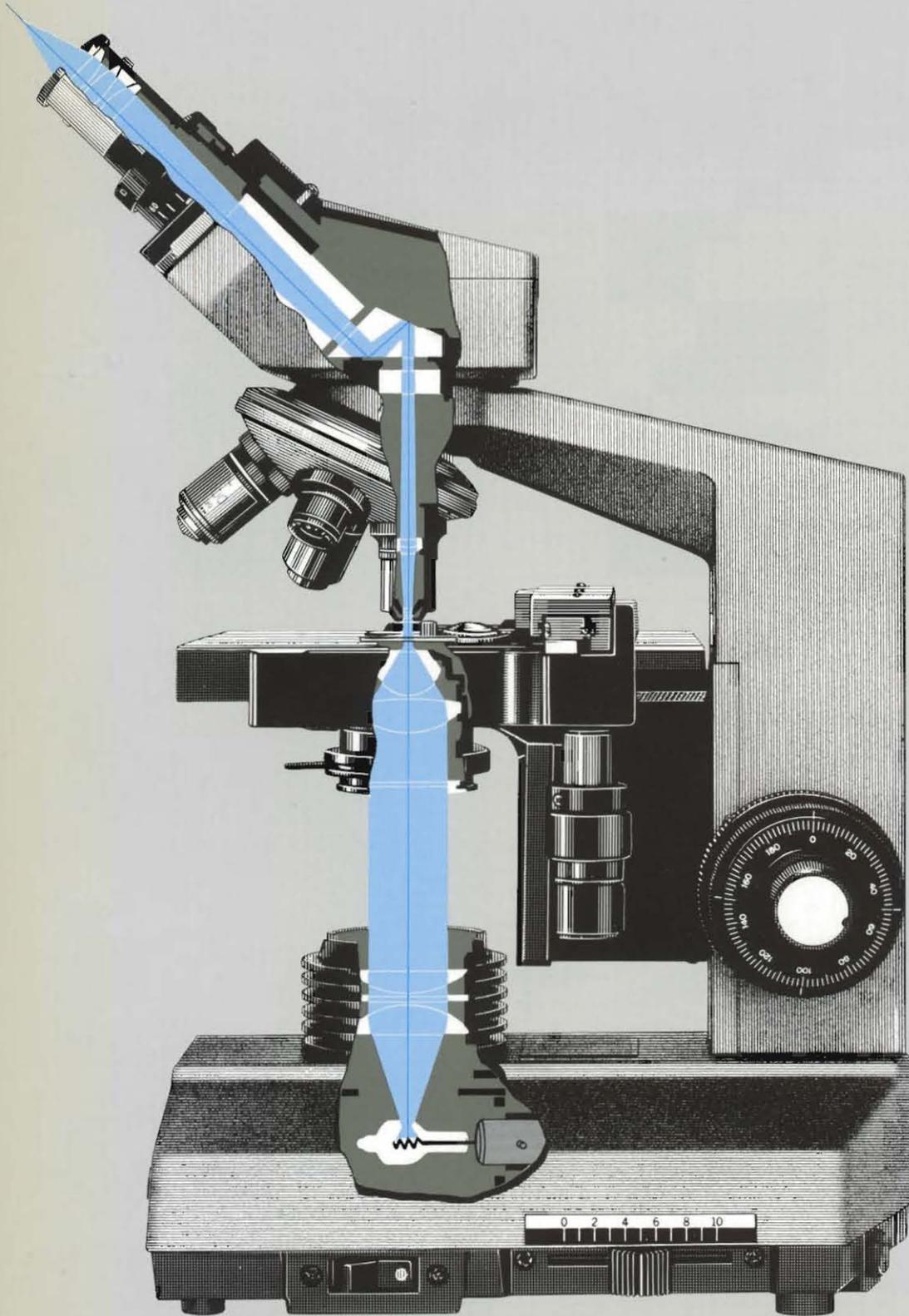
CH

System Microscope

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The Olympus Series CH— Exceptional Quality, Flexibility and Economy



Olympus, one of the world's leading microscope and precision instrument makers, has endowed the Series CH with outstanding capabilities. However, this high quality classroom/laboratory microscope series is priced lower than you would normally expect. Advanced Olympus technology makes the Series CH an outstanding investment in quality and reliability. Series CH microscopes are designed to assure many years of trouble free performance in hard, everyday use. Special attention has been devoted to provide maximum operating comfort and durability. The modular design provides a potential for easy future up-grading to satisfy new and expanding needs. Judged on the basis of performance or cost, the Olympus Series CH proves to be an unbeatable investment.

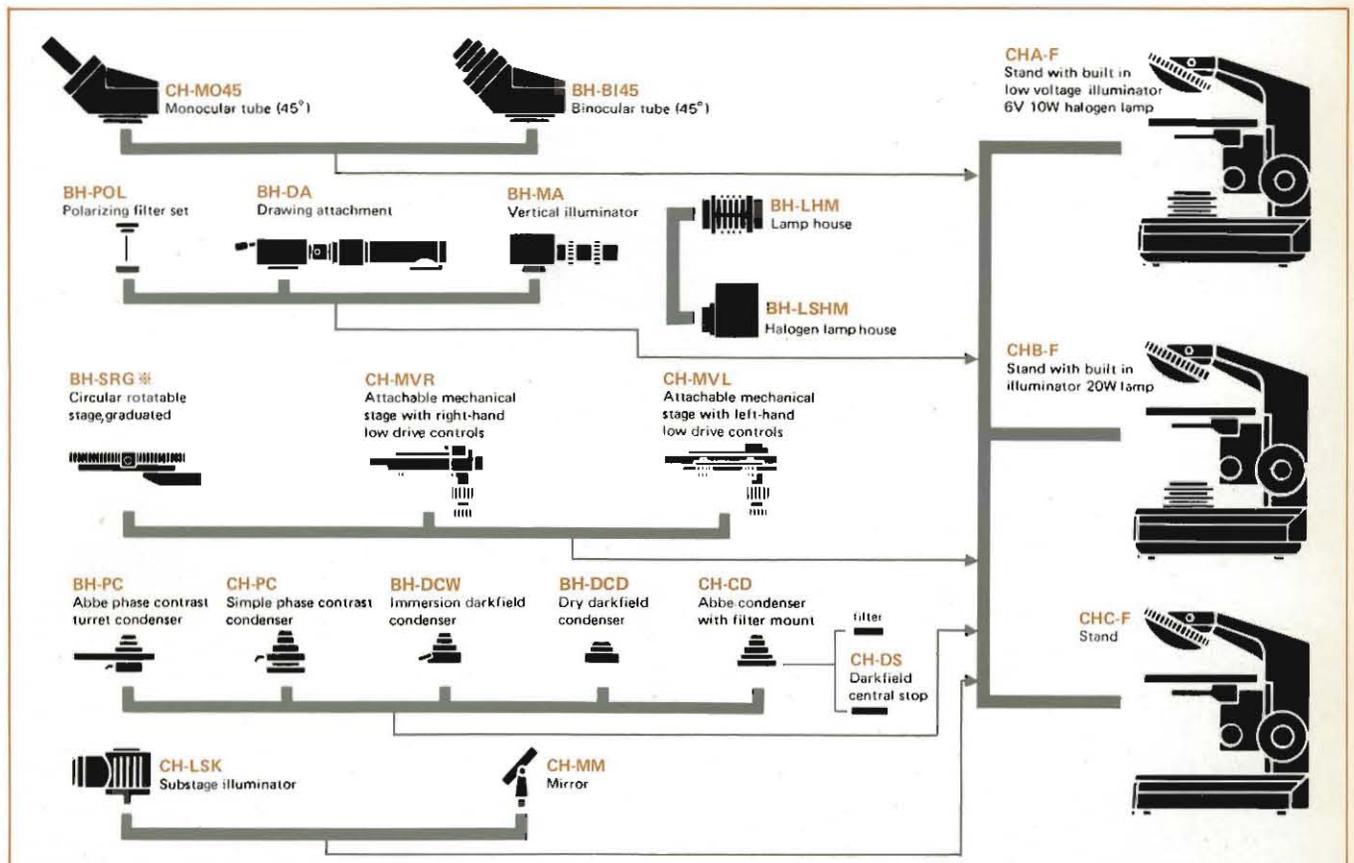
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CH

Combination of Various Components and System Chart

Components	Models	CHA	CHB	CHC		
		213	213	212	012	001
Microscope stand	CHA-F	1				
	CHB-F		1			
	CHC-F			1	1	1
Observation tubes	Monocular tube CH-MO45				1	1
	Binocular tube BH-BI45	1	1	1		
Mechanical stage	CH-MVR	1	1	1	1	
Stage clips (paired)	CH-SCBI					1
Abbe condenser	CH-CD	1	1	1	1	1
Objectives	Ach 4X	1	1			1
	Ach 10X	1	1	1	1	1
	Ach S-40X (spring-loaded)	1	1	1	1	1

Components	Models	CHA	CHB	CHC		
		213	213	212	012	001
Objectives	Ach S-100X oil (spring-loaded)	1	1	1	1	
Eyepieces	WF10X				1	1
	BiWF10X (paired)	1	1	1		
Halogen light source CH-LSH	Lamp Socket C-LSH	1				
	Halogen bulbs 6V 10W HAL	2				
Tungsten bulbs	CH-20W-SB (100, 110, 120, 220, 240V)		3			
	Plano-concave mirror with fork CH-MM			1	1	1
Spare fuses	0.5A for 100, 110, 120V (or 0.3A for 220, 240V)	2	2			



※ Please specify with your order, stage must be factory installed.

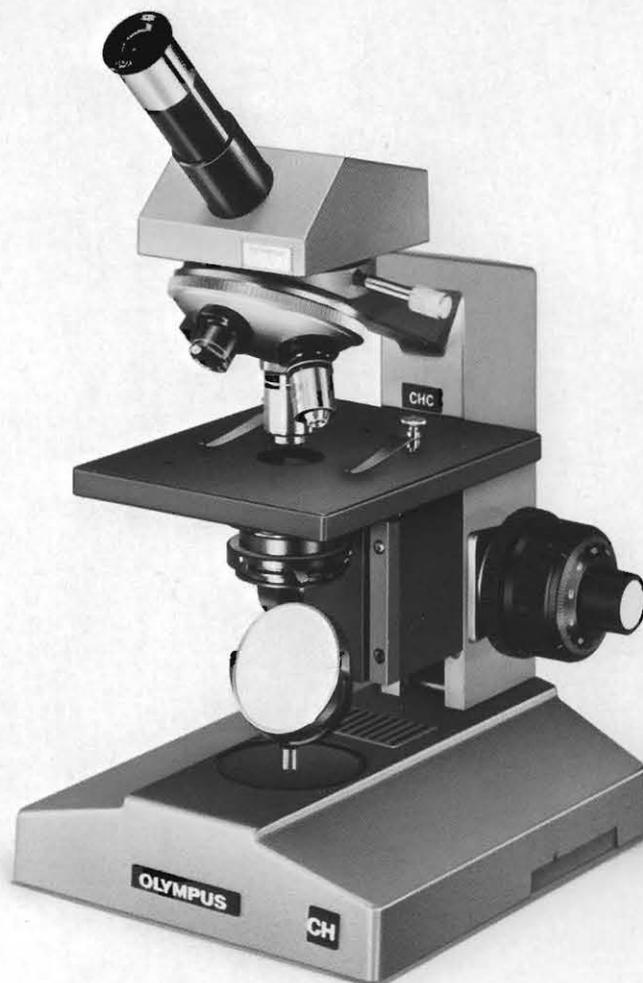
3 Basic Models Offer a H

Features:

- Superb quality optics.
- Modern, square-line design.
- Rugged limb and large, stable base.
- Large, easy-to-operate coaxial knobs for focusing adjustment.
- Fine focusing adjustment throughout the coarse adjustment range.
- Double protection for specimen and objective by means of spring-loaded objectives (40X and 100X) and a pre-focusing lever.
- Ball bearing revolving nosepiece.
- Smooth acting mechanical stage featuring ball bearings.
- Wide range of optional accessories.
- Potential for performance up-grading.
- Detachable base plate with built-in electronics for easy servicing.

CHC

Simple base with a mirror or an optional substage illuminator
Model LSK (20W)

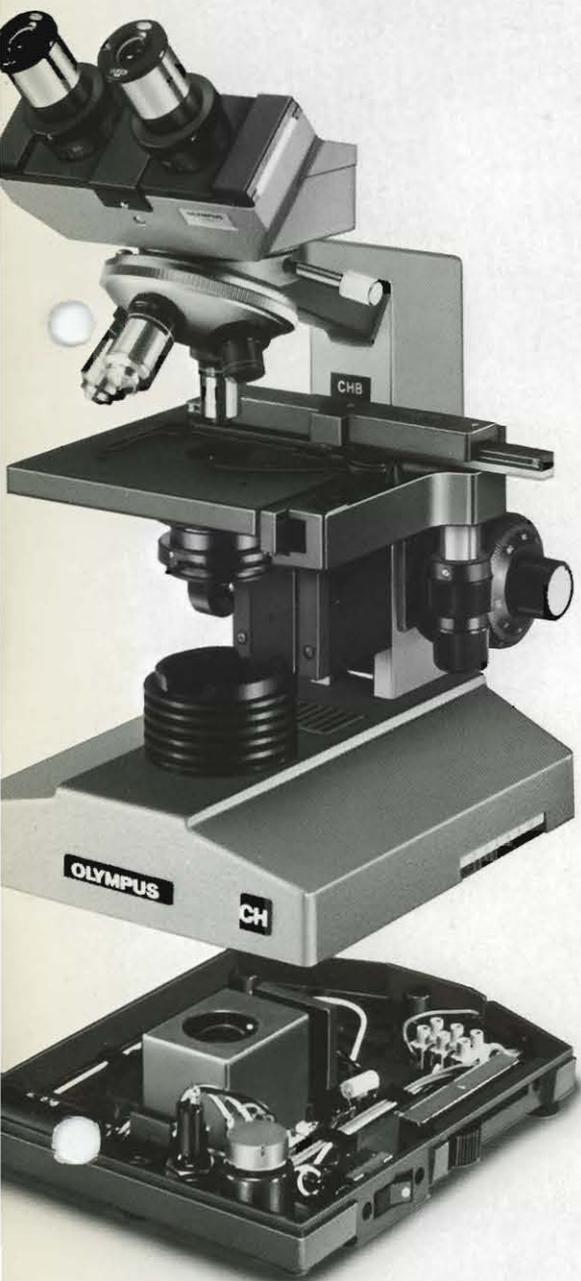


Most of Design Refinements

CH

CHB

Built-in 20W tungsten light source.



CHA

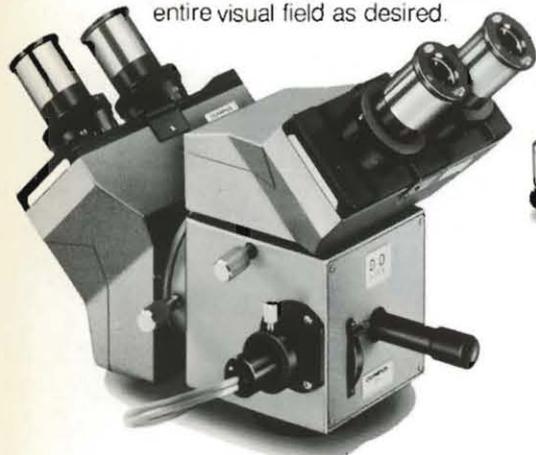
Built-in 6V, 10W halogen light source, more than twice as bright as the CHB; bright enough even for use with darkfield condenser, polarizing or phase contrast attachments.



Optional Accessories for Greater Flexibility

Dual Observation Attachment Model BH-DO

Designed for discussion and teaching purposes, the Model BH-DO features two observation tubes for simultaneous observation by two persons. Discussion is facilitated by an illuminated pointer that can be moved throughout the entire visual field as desired.



Drawing Attachment Model BH-DA

The Model BH-DA is attached between observation tube and stand and allows drawing of microscopic images on white paper while looking through the microscope. Drawing magnifications range from 20X to 1000X.



Vertical Illuminator Model BH-MA

The Series CH, primarily designed for observation with transmitted light, can be easily converted into a reflected light microscope for observation of opaque specimens by attaching a vertical illuminator. The vertical illuminator comes with either a 15W tungsten bulb or 50W halogen lamp. In this application, however, metallurgical objectives must be used instead of the standard bright field objectives for transmitted light.



Halogen lamp house



Phase Contrast Attachment Model BH-PC-PB

Indispensable for observation of transparent specimens such as living cells or platelets. Choice of four contrasts: positive low low, positive low, negative medium and negative high.



Darkfield Condensers Model BH-DCD/DCW

Both condensers are of the highly efficient cardioid type. The Model BH-DCD dry condenser is used with 10X and 20X objectives without immersion oil, for routine darkfield microscopy, NA 0.8–0.92. The Model BH-DCW immersion type wide field condenser is for observation of extremely minute or low-contrast specimens. The objectives to be used are 10X to 100X, oil, NA 1.2–1.4.



Simple Phase Contrast Attachment Model CH-PC

Consisting of standard phase objectives 10X, 20X and 40X, individual phase annuli and Abbe type condenser, this attachment offers a low-cost way of phase contrast observation. Despite its simplicity the performance of this attachment is comparable to the one of the model BH-PB.



Darkfield Central Stop Model CH-DS

Offers the simplest and quickest way for showing students what darkfield illumination is (suitable for low and medium power objectives)



Simple Polarizing Attachment BH-POL

A filter polarizer and filter analyzer set for easy detection of birefringent substances in the specimen.



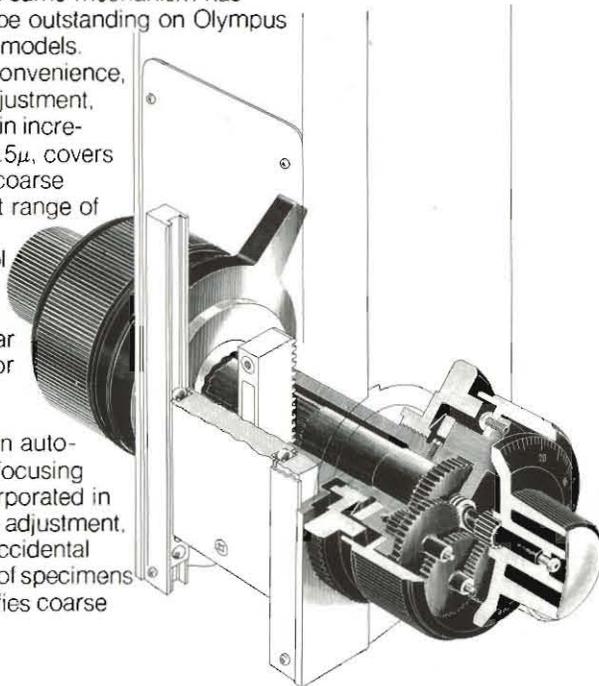
Outstanding and Proven Design Features from Top-of-the-Line Models

1 Focusing Mechanism

The coarse and fine adjustment knobs are coaxial and share a common guideway to assure a smooth, even motion throughout the 30-mm focusing range. This same mechanism has proved to be outstanding on Olympus high-class models.

For extra convenience, the fine adjustment, graduated in increments of 2.5μ , covers the entire coarse adjustment range of 30mm.

The control knobs are large and located near the base for maximum operator comfort. An automatic pre-focusing lever, incorporated in the coarse adjustment, prevents accidental damaging of specimens and simplifies coarse focusing.



2 Revolving Nosepiece

The Series CH features a top-quality quadruple revolving nosepiece.

This is extremely rare for a microscope in this price range. Mounted on 81 ball bearings, it assures light, smooth rotation and maintains excellent parfocality and parcentricity.

The design is unsurpassed for long life and precision performance.

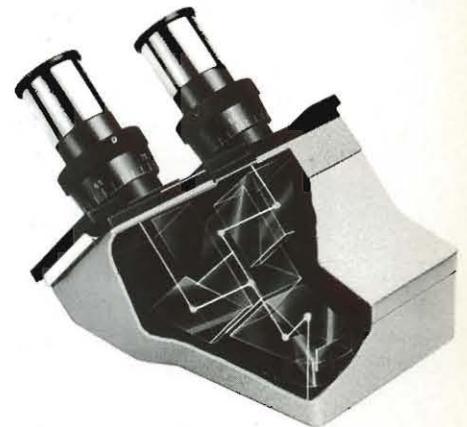


3 Mechanical Stage

The mechanical stage is attachable to the plain stage (124mm x 153mm), which is part of the microscope stand.

Ball bearing guides and coaxial controls ensure smooth, accurate movement over an area of 56mm x 76mm.

Graduated for convenience of specimen relocation. Standard set comes with right-hand low-drive control knobs. A version for left-hand control is available optionally.



4 Binocular Observation Tube

A special Olympus coating process reduces light loss to a negligible level and makes it possible to transmit more than twice as much light as through conventional observation tubes. This feature broadens the scope of applications of this microscope to include phase contrast or darkfield observations and dual observation for discussion purposes, where more light is required.

An unwavering will to remain
at the forefront of scientific discovery,
and an uncompromising commitment
to quality have made the name
of Olympus a synonym of high performance
and reliability all over the world.

From cameras and microcassette recorders,
to microscopes for various applications,

fiberscopes, and facsimiles,

Olympus has kept abreast
of the most advanced technologies
and discoveries, constantly striving
to develop products which meet the new
and more complex needs

**Progress
through
Precision**

of our rapidly changing society.

Precision engineering,
long experience,

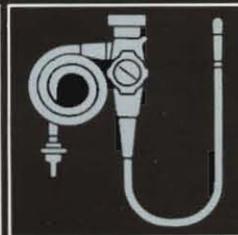
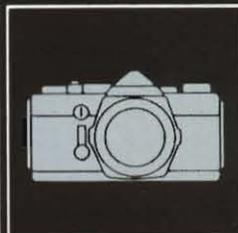
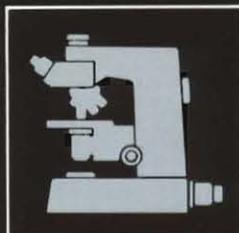
and R&D activities tuned to the requirements
of man in his search for a better life,

have earned Olympus its unparalleled position
in the medical profession, in the photographic industry,

in the laboratory and the classroom,
and in the eyes of all those who benefit

from the functionality, accuracy,
versatility and economy of its products.

Photographic,
Medical,
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OLYMPUS

OLYMPUS OPTICAL CO., LTD.

San-Ei Building, 22-2, Nishi Shinjuku 1-chome, Shinjuku-ku, Tokyo, Japan

OLYMPUS OPTICAL CO. (EUROPA) GMBH.

Postfach 104908, Wendenstrasse 14-16, 2 Hamburg 1, West Germany

OLYMPUS CORPORATION OF AMERICA

4 Nevada Drive, New Hyde Park, N.Y. 11042, U.S.A.

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