# OLYMPUS 

Olympus is about life. About photographic innovations that capture precious moments of life. About advanced medical technology that saves lives. About information- and industry-related products that make possible a better living. About adding to the richness and quality of life for everyone. Olympus. Quality products with a FOCUSONLIFE


BX2 SERIES

## ryt

The new standard for laboratory microscopes


## BKZ4]

## The laboratory microscope that's all quality

- Cost-efficiency
- High degree of versatility and modularity
- Easy operation
- New ergonomic design
- Olympus UIS* (Universal Infinity System) optics
- Wide magnification range ( $1.25 \times-100 \times$ )
- Reliability
- Rigid Y-shape frame
- Superb fluorescence microscopy


## *Note:



Wide magnification range


## A wide range of accessories and easy operation for your application

The choice of cost-effective accessories provides wide-ranging capability, meeting today's expanding microscope applications and observation methods. Simple operating procedures ensure outstanding effectiveness in all routine work, making the BX41 the natural choice for your application.

Magnifications from $1.25 \times$ to $100 \times$ without changing the condenser give wide-ranging observation flexibility
The BX41 allows continuous observation over the wide magnification range of $1.25 \times$ to $100 \times$. Next to the standard quintuple revolving nosepiece, a sextuple nosepiece with accessory slot is available. With the U-SC3 swing out condenser, it is possible to get optimal illumination from $1.25 \times$ to $100 \times$ without changing the condenser.

* When photographing with the $1.25 \times$ objective, please use the ultra low condenser U-ULC2.


## A broad range of objectives for every individual need

For quality and cost-efficiency, the BX41 uses the Achromat (ACH), Plan (PL) and semi apochromatic Universal Plan (UPLFL) objective series.

Easy, accurate gout inspection
A transmitted light gout analyzer (U-GAN) and rotatable stage (U-SRG2) are provided for easy, accurate gout detection.


UPLFL40×P, PE2.5x, U-TP 530

(1) U-SRG2 rotatable stage (2) U-POT polarizer
(3)U-GAN gout analyzer

A wide choice of condensers for a variety of applications
Different types of observation methods require different condensers, and the BX41 includes a practical range of specially designed alternatives: the highly cost-effective Abbe condenser (U-AC2); a swing-out condenser (U-SC3); a phase-contrast condenser (U-PCD2); and a choice of darkfield condensers (U-DCD, U-DCW).

(1) U-SC3 (2) U-AC 2 (3)U-AAC

(1)
(2)
(1) U-DCD (2) U-DCW


High performance in routine fluorescence observation
An integrated reflected light illuminator (BX-URA2) has been developed to minimize aberration. Fluorescence images of nearly twice the conventional brightness are obtained. A highly cost effic ient fluorescence unit ensures that the BX41 complies with the requirements of routine fluorescence microscopy. A research fluorescence illuminator is also compatible with the microscope frame.


BX-URA2 reflected light illuminator

## Applied ergonomics for easier, more comfortable work

The BX41 ergonomics meet the key operator requirement of conducting observations over a long period without discomfort. Careful study of such critical aspects as observation posture, the positioning of control elements, and making the most effective use of work space has led to refinements in ergonomic design and structure that enable every operator to work in comfort even during prolonged observations.

The right eyepoint means less fatigue
The right eyepoint is vital for working in comfort, and the BX41's tilting binocular tube (U-TBI-3) enables every operator to select the most suitable position. The eyepoint adjuster (U-EPA2) allows the eyepoint position to be raised by up to 60 mm .

## Easy-to-operate fine focusing knob



The detachable fine focusing knob is coated to have a smooth, pleasant surface, easy to operate even with a single finger. It can also be attached to either side of the microscope, so that operators can always use their favored hand for focus and stage control. Tactile covers are fitted to the $X$ and $Y$ stage controls to provide a " light touch " stage movement.


Ergonomic Y-shaped design frees up more desk space
4. The BX41's space-efficient Y-shaped design and the use of a reshaped fine focusing knob help to maximize the free desk area.



## Stage innovation for your comfort

At 204 mm , the height of the stage above the desk surface is designed for increased working comfort. A unique new dual pulley system has been introduced to govem stage movement. Replacing the previous rack \& pinion system, it saves space around the stage. The specimen positioning can be optimized not only by X-Y movement but also by rotation of the stage by up to 250 degrees - a valuable feature for photographic, digital or video documentation.


Oil rectangular stages (U-SVRO, U-SVLO)
These stages are designed with grooves that prevent the adhesion of slides due to the occasional spill of immersion oil or mounting medium.


## Accessories for greater versatility

The BX41 features a wide choice of accessories, facilitating image recording and discussion. Choose from photomicrography equipment, digital and video cameras, and discussion accessories.

## Image recording equipment

## DP11

Microscope digital camera system
With its $2 / 3$ inch 2.5 million pixel CCD camera, the DP11 delivers the outstanding image quality that today's users demand. Clear color reproduction and high sensitivity are achieved by the use of a newly developed RGB primary color on-chip filter. Images are captured at a maximum of $1712 \times 1368$ pixels, enabling clear, detailed reproduction of even very small areas of the image. The 1.8 -inch TFT color LCD displays $2.4 \times$ magnified images at 120,000 pixels, making accurate focusing quick and easy.
Two memory card slots on the camera head allow maximum storage of 64MB (SmartMedia) or 96MB (CompactFlash) - - enough for 390 (SmartMedia) or 580 (CompactFlash) images in standard quality $640 \times 512$ mode or 8 (SmartMedia) or 12 (CompactFlash) images in super high quality TIFF mode.


PM10SP
Automatic photomicrographic system The PM10SP features 1\% spot and $30 \%$ average light metering, along with 3 zones of reciprocity failure adjustment, auto/manual/time setting modes and AE lock function. The 35 mm configuration features a multi exposure mode.


U-TRU
Trinocular intermediate attachment This intermediate trinocular attachment can be used simultaneously with the inclinable binocular observation tube (U-TBI-3). Two light paths are selectable: $100 \%$ light for binocular observation or $20 \%$ for binocular observation and $80 \%$ for imaging through the trinocular port.


## PM20

Automatic photomicrographic system Perfect for all standard photomicrography, this widely-used system also employs a fluorescence auto mode, enabling fully automatic exposure in fluorescence photomicrography without complex calculations. In addition, there's a choice of two auto exposure metering areas: $1 \%$ spot and $30 \%$ average.


## Discussion attachments

## U-DO3

Dual observation attachment For enhanced specimen review or teaching/instruction an arrow pointer is interposed in the same viewing field.


## TR-Adapter






OBJ ECTIVES
U-ANT
Analyser for
Analyser for
transmitted light
$\square$ (0)



DIC slider for transmitted light

U-DICTS
Shift DIC slider for transmitted light

U-DICTHR High resolution DIC slider for transmitted light U-DICTHC High contrast DIC slider for transmitted light




BX41 specifications

| Microscope frame | Optical system | UIS optical system |
| :---: | :---: | :---: |
|  | Focus | Vertical stage movement: 25 mm stage stroke with coarse adjustment limit stop Torque adjustment for coarse adjustment knobs <br> Stage mounting position variable <br> High sensitivity fine focusing knob (adjustment gradations: $1 \mu \mathrm{~m}$ ) |
|  | Illuminator | Built-in Koehler illumination for transmitted light 6V30W halogen bulb (pre-centered) <br> Light preset switch |
| Revolving nosepiece |  | Interchangeable reversed sextuple/quintuple nosepiece |
| Observation tube | Widefield (F.N. 22) | -Widefield binocular, inclined $30^{\circ}$ <br> -Widefield tilting binocular, inclined $5^{\circ}-35^{\circ}$ <br> -Widefield trinocular, inclined $30^{\circ}$ <br> -Widefield ergo binocular, inclined $0^{\circ}-25^{\circ}$ |
|  | Super widefield (F.N. 26.5) | Super widefield trinocular, inclined $24^{\circ}$ |
| Stage |  | Ceramic-coated coaxial stage with left or right hand low drive control: with rotating mechanism and torque adjustment mechanism, optional rubber grips available (Non stick grooved coaxial, plain, rotatable stages are also available) |
| Condenser |  | -Abbe (N.A. 1.1), $4 \times-100 \times$ <br> - Swing out Achromat (N.A. 0.9), $1.25 \times-100 \times$ (swing out: $1.25 \times-4 \times$ ) <br> -Achromatic Aplanat (N.A. 1.4), 10x-100x <br> - Phase-contrast, darkfield (N.A.1.1), $4 \times-100 \times$ <br> -Darkfield dry (N.A. 0.8-0.92), 10x-400x <br> -Darkfield oil (N.A. 1.20-1.40), 10x-100x <br> - Ultra low (N.A. 0.16), 1.25x-4x |

## High-quality, cost-efficient objectives

## ACH (ACH PH) series

Cost-effective standard objectives for transmitted light brightfield. For phase-contrast microscopy, the ACH PH series is also available.

## PL (PL PH) series

Ensures superb field flatness up to F.N. 22 with brightfield observation in transmitted light. For phasecontrast microscopy, the PL PH series is also available.

## UPLFL (UPLFL PH) series

These universal objectives perform superbly with a wide range of microscopy techniques. The UPLFL PH series is designed for phase-contrast microscopy.

BX41 dimensions
(unit: mm)


The length marked wth an asterisk (\%) may vary according to interpupilary distance. Distance for figure shown is 62 mm


Specifications are subject to change without any obligation on the part of the manufacturer.


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