

**CX41** 

CX2 Series



### Optics and Performance Outstanding in its Class



# Advanced optical and system performance with excellent cost-efficiency

The evolution of this bestselling microscope delivers new, cost-efficient improvements in both optics and system performance. Newly equipped with Olympus' leading-edge UIS2 optical system, it provides significantly enhanced image clarity in a variety of observation methods, from brightfield to reflected light fluorescence. For all inspection and training applications in the fields of biology and medicine, the CX41 sets the pace for its class in both basic and system performance.



Excellent cost-performance in reflected light fluorescence and other observation methods



### Slide condenser / CX-SLC **Brightfield condenser / CH3-CD**

These Abbe type condensers allow brightfield observations from 4x to 100x. Accurate centering is provided by the attachment lens (CX-AL) and the iris diaphragm, to exclude unnecessary light and obtain bright Koehler illumination right across the magnification range. These highly economical condensers enable phase contrast and darkfield observations by simply adding basic accessories.



### Simple phase contrast attachment / CX-PH1, 2, 3

For phase contrast observations at 10x, 40x and 100x.



### Darkfield central stop / CH2-DS

For darkfield observations from 4x to 40x. \* Separate filter holder (CH2-FH) or attachment lens (CX-AL)

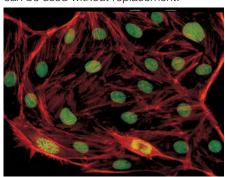


### Low magnification adapter /CX-LA

Use of the 2x low magnification objective allows macro observation.



Users can choose between blue or green excitation and transmitted light observations. UIS2 optics provide bright fluorescence images, with no intermediate magnifications when changing from transmitted light to fluorescence observation. Standard PLCN objectives can be used without replacement.





### Simple polarizing condenser / CH3-CDP

With the optional plate adapter U-TAD, polarizing observations from 4x to 100x using a tint plate can be performed. A U-GAN analyzer is provided for urate crystals observation. Polarizing objectives

from 4x to 100x are available.

\* Separate polarizer U-POT and analyzer U-ANT required.



### Dry darkfield condenser / CX-DCD

This dry-type darkfield condenser gives a superior darkfield effect without the need for immersion in oil. Suitable for use at 10x and 40x magnifications.



## Dependable basic performance assures outstanding operational convenience



### Move the specimen with just one finger

Rubber grips are provided for the stage handles, allowing the specimen to be moved smoothly with just one finger. The slim body and conveniently positioned controls ensure that everything is within easy reach, so operators can maintain a natural posture.



### Tilting binocular tube / U-CTBI

The tilting binocular tube lets each operator select the most suitable and comfortable eyepoint — a valuable contribution to reducing fatigue in extended observation sessions.



### Inward-facing quintuple revolving nosepiece

The quintuple revolving nosepiece enables a wide range of magnification observations and various combinations of objectives. Unrestricted access to the space in front of the objective allows specimens to be exchanged quickly and easily.



### Rackless stage with enhanced operability

To keep the work area clear, and to avoid interference with observation operations, the X-direction travel guide does not extend out from the side of the stage. The main and sub-scale displays are designed for easy read-out.



#### Phase-contrast condenser / CX-PCD

The multi-purpose CX-PCD condenser allows observation of brightfield, phase-contrast and darkfield images without exchanging condensers. Phase-contrast

observation from 10x to 100x and darkfield observation from 10x to 40x is allowed.



### Torque adjustable focusing knob

The torque of the coarse focusing knob can be adjusted, to suit different operators' needs and to make focusing smooth and easy while keeping the hands on the desk. A stage upper limit stopper is also provided.



### Easy transportation and installation

The CX41 is eminently portable, with convenient handgrips at the front and back of the frame and no inconvenient protrusion of the stage guide.



### Anti-fungus treatment

The treatment applied to the observation tubes, eyepieces and objectives, protects quality of optical parts even in high humidity regions.

### More accessories, more observation versatility



### **Dual observation attachment/ U-DO3**

Enables dual, simultaneous observation of a single specimen from the same direction with equal magnification and brightness for both operators. A pointer can be used to indicate specific sections of the specimen to simplify the training process and enhance discussion.

### Eyepoint adjuster/ U-EPA2

Allows the eyepoint position to be raised by 30 mm. Up to two eyepoint adjusters can be attached between the frame arm and observation tube.



### **Arrow pointer/ U-APT**

Enables insertion of an LED arrow for display in a digital image.



### 2x magnification changer/ U-ECA

Magnification is doubled by engaging the auxiliary 2x lens.



### **Drawing attachment/ U-DA**

The drawing attachment projects an image of the pencil and drawing surface into the visual field.



### Trinocular intermediate attachment/ U-TRU

A binocular tube on its own allows digital imaging in combination with this trinocular intermediate attachment.



### Trinocular tube/ U-CTR30-2

Digital or video cameras can be attached for on-site/ remote illustration of educational/ discussion meetings.

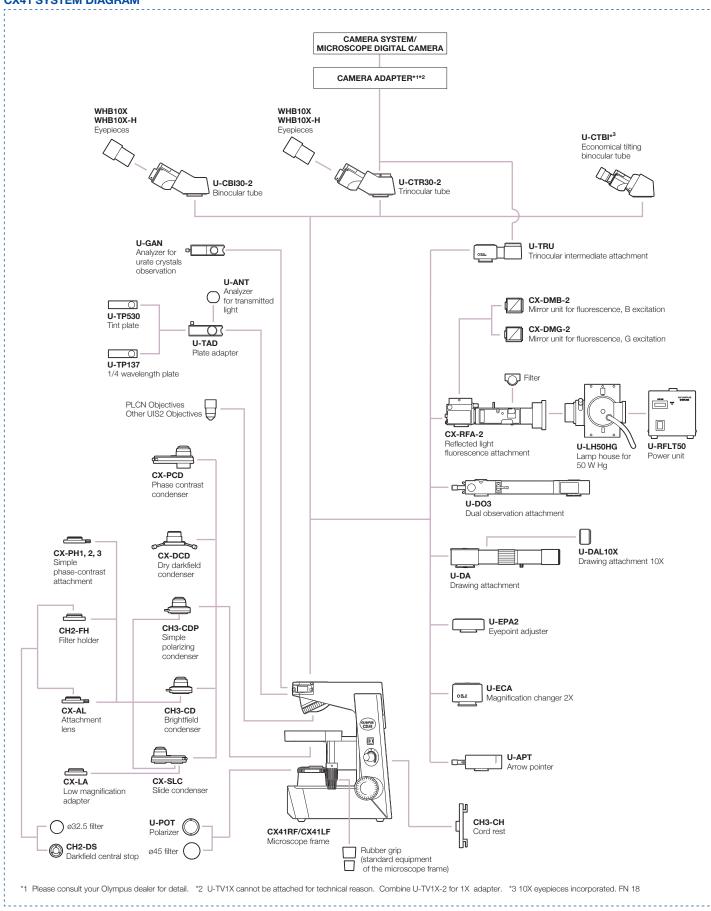
### Digital camera/ DP22

High-definition images displayed with stunning detail in real time. Seamless conference support with real-time image display and smooth operation.

\* DP22 digital camera is not for clinical diagnostic use.



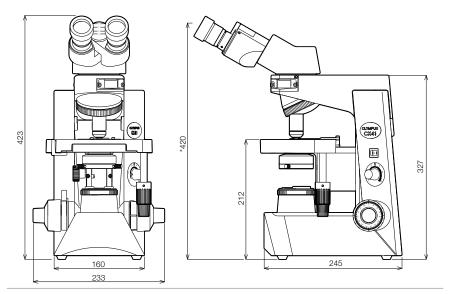
#### **CX41 SYSTEM DIAGRAM**



#### **Specifications**

Item		CX41		
Optical system		UIS2 (Universal Infinity-corrected) optical system		
Illumination		Built-in transmitted Koehler illuminator 6 V 30 W halogen bulb AC100–120V/220–240V 0.85/0.45A 50/60Hz		
Focusing		Stage height movement by roller guide (rack & pinion)  Full stroke range: 25 mm  Upper limit stopper  Tension adjustment on coarse focus adjustment knob   Stroke per rotation: 36.8 mm  Stroke per rotation: 36.8 mm		
Revolving nosepiece		Fixed quintuple nosepiece with inward tilt		
Observation tube	Type	U-CBl30-2, Binocular	U-CTR30-2, Trinocular	U-CTBI, Tilting binocular
	Field number	20	20	18
	Tube inclination	30°	30°	30° -60°
	Interpupillary distance adjustment range	48 - 75 mm	48 - 75 mm	48 -75 mm
	Light path selector	None	None (BI 50 %, Video/Photo 50 % fixed)	None
Stage	Size	188 (W) x 134 (D) mm		
	Movement range	76 mm (X-direction) x 50 mm (Y-direction)		
	Specimen holder	Double slide holder		
	Rubber grip	Equipped as standard		
Condenser (CH3-CD)	Туре	Abbe condenser		
	NA	1.25 with oil immersion		
	Aperture iris diaphragm	Built-in		
Dimensions & weight		233 (W) x 432 (H) x 367.5 (D) mm, approximately 8.5 kg (approximately 18.7 lb.)		

#### (Unit: mm) **Dimensions**



\* The length marked with an asterisk (\*) may vary according to interpupillary distance. Distance for figure shown is 62 mm.

### **Objectives, Plan Achromat**

PLCN	Numerical Aperture (NA)	Working Distance (W.D.)		
4X	0.10	18.5 mm		
10X	0.25	10.6 mm		
20X	0.4	1.2 mm		
40X	0.65	0.6 mm		
60X	0.8	0.2 mm		
100XO	1.25	0.13 mm		
100XOI	1.25-0.6	0.13 mm		

### **Eyepiece**

	Field Number (FN)
WHB10X	20

- OLYMPUS CORPORATION is ISO14001 certified.
- OLYMPUS CORPORATION is ISO9001 certified.
- OLYMPUS CORPORATION is ISO13485 certified.
- Illumination devices for microscope have suggested lifetimes.
  Periodic inspections are required. Please visit our website for details.
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