

MICROSCOPY ADVICE

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I have been reading the comments in the sci.techniques.microscopy group and I am impressed with the high level of knowledge that Kevin has about microscopes. Hope he read this.

I was given a used microscope CORRECT TOKIO of SEIWA OPTICAL, in a very good condition <http://www.seiwaamerica.com/>. It was built in 1988 as it stated in the certification card which comes with it.

My Biological Microscope Model SB-BI-1

1. Total Magnification: 40X, 100X, 400X, 1000X
2. Mechanical Tube Length: 160 mm
3. Tube: 30 degree, inclined binocular tube interpupillary distance adjustment 55-75 mm on both tubes. Dioptic distance adjustment on both tubes, 360 ° rotatable.
4. HWF 10X (FN 16.5x pair)
5. Nosepiece: Quadruple with click stops
6. Objective (Din Type) 4X (0.10), 10X (0.25), 40X (0.65), 100X OIL (1.25)
7. Focus Adjustment: Coaxial Type/ Coarse & Fine adjustment (2 mm travel / 0.002 mm sensitivity with safety stopper)
8. Mechanical stage 120 mm X 122 mm with coaxial handle. Travel /35 mm X 75 mm (no idea, maybe)
9. 6V/20W Halogen Lamp Transmitted illuminator with intensity regulator
(low voltage 6V/3.5^a) Built in transformer 220-240VAC
10. Condenser: Abbe type N.A. 1.25 condenser with iris diaphragm, filter
Rack & pinion focusing mechanism.
11. Dimensions 380mm(H)X300mm(D)X210mm(W)
12. Weight: 6.8Kg
13. Wood Carrying Case

I been making some pictures from it and now I want to improve my Microscope with some devices, therefore I need an expert advice to buy the following:

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A. TRINOCULAR HEAD: As the original is very expensive I have found the following offer:

from <http://www.radicalindia.com/>

"We can supply Trinocular Head suitable for Saiwa Optical Microscope.

The Inclination angle is 45°, costing US\$ 105.00 each (ex-factory).

Photograph attached."

Also they promise to give me the correct circular attachment as mine is 52 mm.

Is it worth or I am wasting my money (original SEIWA trinocular head costs US\$ 400)?

B. CONTRAST CONDENSER: Their offer is:

Brand New Phase Contrast Condenser with Objectives 10x, 20x, 40x & 100x Oil with telescopic eyepiece will cost @ US\$ 425.00 each Nett Ex-Factory.

Will it make a great difference? Currently I am taking pictures which look like the ones taken with this device using a glass with a dark point in the filter rack of the condenser. Is it worth?

C. DARK FIELD: Also they offer me the following:

Dark-Field Attachment @ US\$ 274.00 each

Consists of dark-field condenser and 100x oil immersion with built-in iris diaphragm.

I am asking for an advice because I am completely ignorant in this subject and I have no place to ask. Any comment from you will be appreciated.

Thanking you in advance.

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