

## QX3 Computer Microscope (General Comments)

### 1. Setup:

Setup clear cut and easy. A couple of options. Put everything on the hard drive or just a limited portion and run using the CD. I have tried both and they work equally well.

If you leave the microscope plugged into the UBS slot the light on the scope stays on. I prefer to connect it only when I am using it. It gets recognized immediately. No problem here.

### 2. Manual:

The Quick Start Guide is well done.

The flip side of this guide is an Activity Manual. Besides simply taking the picture there is information on where and how to obtain samples as well as how to prepare them. Besides still shots it is possible to take movie clips and time lapse movies. (I have only used the still shot mode.)

There are different paint tools, stamps, etc., which I have not used. A reasonably good graphics program -- which generally accompanies any PC as part of the standard software -- is needed to sharpen, do brightness/contrast and improve color on many of the images for serious work.

### 3. Operation:

#### Lighting:

You have an upper and lower light to illuminate the object. (You can only use one of the other. I found that under 200X I could also use a tensor type light to augment the light that is already available.

#### Magnifications:

10X, 60X and 200X. Under 200X your distance across the field of view is approximately 1 mm. It is awkward -- even extremely awkward under 200X -- to push objects across the small microscope stage. However, I did find the microscope to be fairly parfocal. The 60X can be particularly good when you top light a specimen. Most of your regular dissecting microscopes do not go beyond 30X.

### Saving/Analysis:

The JPEG format and the BMP formats are the two formats available for saving. I did not see any appreciable difference in quality between the two.

If you bring a JPEG image up under Scion Image for measurement purposes you will get an Indexed Color image on front and then a stack that is composed of the three colors that went into making the Indexed Color image. If you use the Indexed Color image you will not be able to change contrast/brightness of the image. You can still measure. You may want to resave this image as a .BMP or .TIFF image.

#### To do Grayscale.

Close the Indexed Color image and go up to Stack to Windows under Stacks on the Menu Bar. This will give you the three images in the stack that went into composing the Color Index image. Then choose Tile Images under Window in the Menu Bar. Click on whatever image of the three looks "best" to you and close the other two. You can enlarge this image by grabbing it in the lower right corner. Now you can do contrast/brightness, density slicing, whatever. Eventually save this image as a .BMP or .TIFF image.