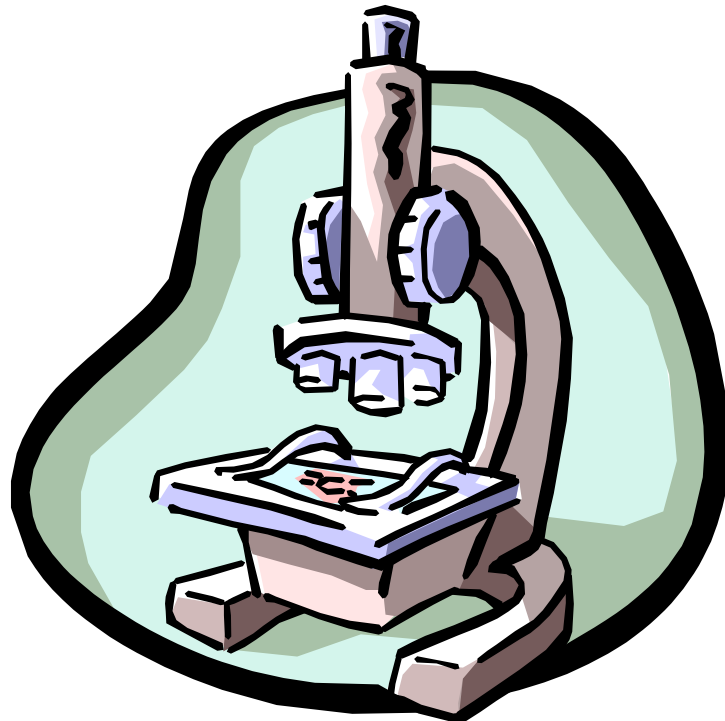


Manual for Operating the DigiScope



DIGISCOPE BASICS

To attach the camera to the scope body, simply line up the camera with the plug towards the back (1) and press it gently into the microscope body (2). Make sure that the lines on the optic piece match the lines on the DigiScope body (3).



(1)



(2)



(3)

Next, plug the DigiScope into the USB port on your laptop. Remember that the camera plug needs to be facing the rear (2). When the DigiScope is properly connected to the laptop, the green light on the camera will come on (3).



(1)



(2)



(3)

There are two DigiScope light sources, upper and lower, located on the base of the DigiScope in the back (1). The upper light is used when looking at non-transparent objects (i.e. leaves, seashells, etc.). The lower light is used for transparent objects (i.e. slides). The viewing tray is removable; it slides in and out of the DigiScope base. To view nonmounted objects, use the side without the slide clips (2). To view mounted objects, use the side with the slide clips (3). There is also a spare tray in the DigiScope bag that has a small cup (and a lid to cover it) for viewing liquid (i.e. organisms in pond water).



(1)



(2)



(3)



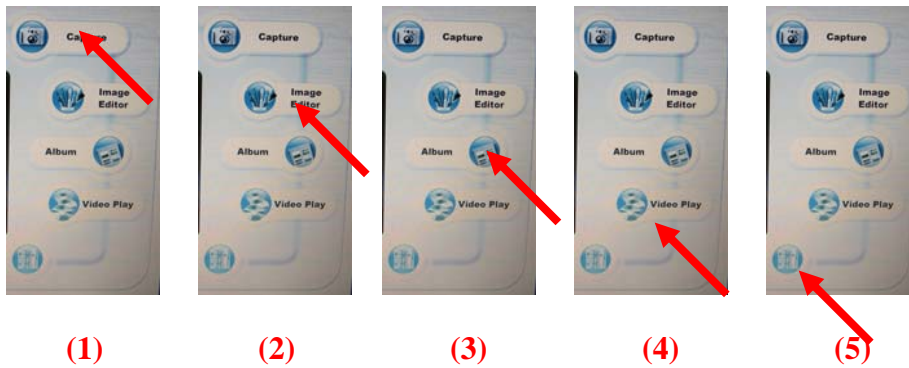
Three AA batteries are needed to operate the light sources. They are housed in the base of the DigiScope.

THE DIGISCOPE SOFTWARE



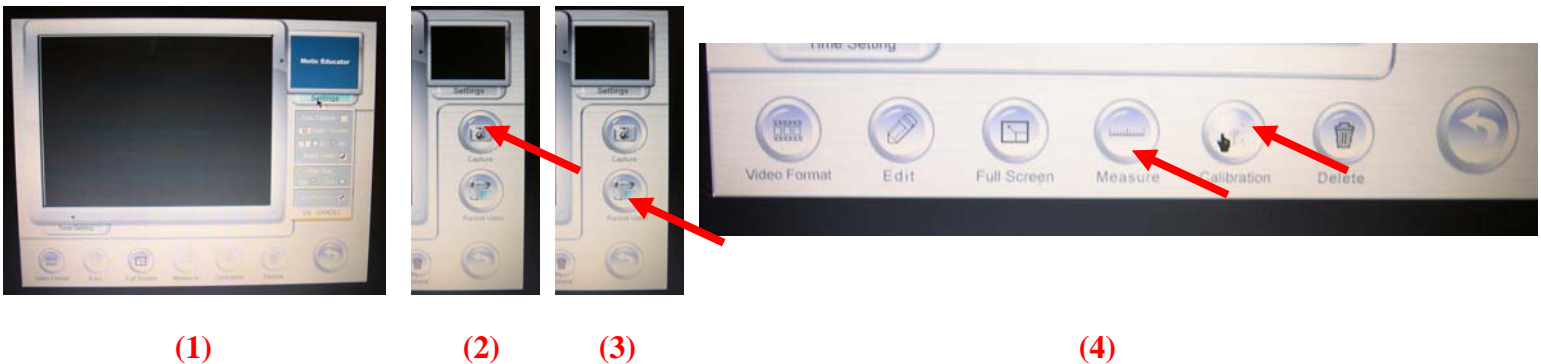
Now that the DigiScope is connected to the computer, click on the MOTIC EDUCATOR shortcut icon located on the desktop. The main screen gives you five options to choose: CAPTURE, IMAGE EDITOR, ALBUM, VIDEO PLAY, and HELP (discussed below). To exit any of the windows in this program, click on the arrow icon.

The CAPTURE icon is used to take pictures, calibrate the scope, and record video of the subject (1). The IMAGE EDITOR icon allows you to modify the captured image (2). The ALBUM icon lets you see all the images you have taken so far and export them to different files if needed (3). The VIDEO PLAY icon plays the video(s) you have recorded and can take stills of the video if desired (4). And the HELP button answers any questions not addressed by this handout (5). When in any of these programs, you can press the arrow icon to return to this main menu.

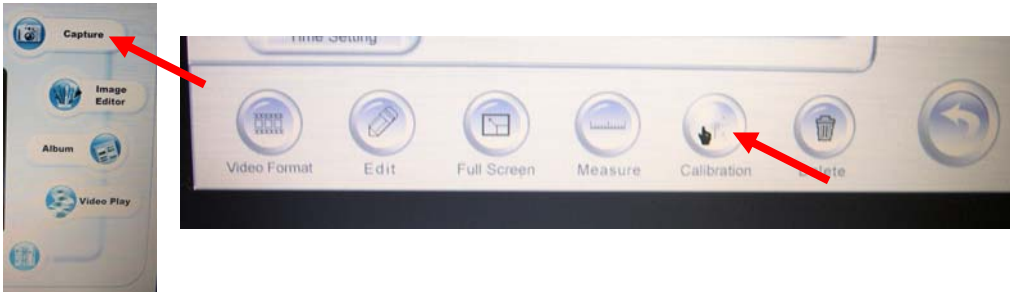


THE CAPTURE PROGRAM

In the CAPTURE program (1), you can take pictures (2) and record video (3). While in this screen, you can also take measurements of whatever you are viewing (4) and calibrate the DigiScope (4).



CALIBRATION

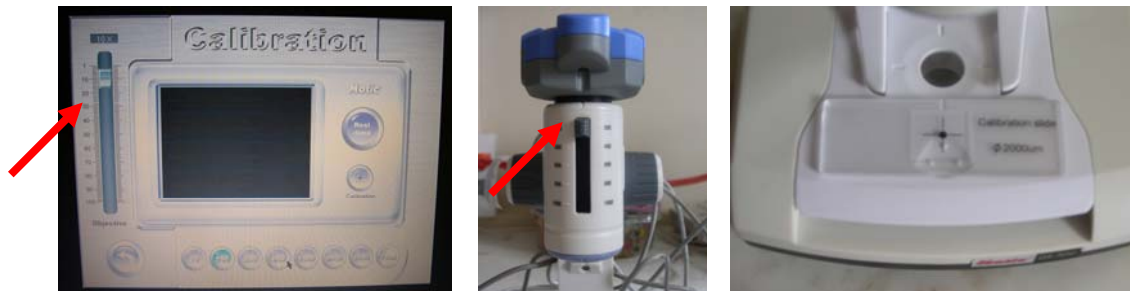


(1)

(2)

The first thing that needs to be done is the calibration. To do this, select CAPTURE from the main screen (1). The calibration icon is located at the bottom of the screen (2).

When you click on the calibration icon, the CALIBRATE window will appear on the screen (1). To calibrate the DigiScope, make sure the objective is set at 20X on the screen (left side of the viewing screen) and on the DigiScope (2). Place the calibration slide on the slide tray, centering the circle over the light hole to the best of your ability (3).

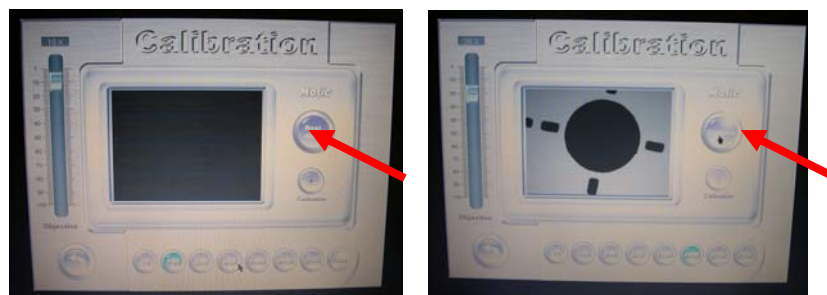


(1)

(2)

(3)

The circle on the calibration slide should show up on the screen (1). If the circle does not appear on the viewing screen, click on the icon on the right side of the viewing screen labeled REAL TIME (2). This button will then be labeled CAPTURE. Click the CAPTURE button once and the image of the calibration circle should appear on the viewing screen.



(1)

(2)

Next, click on the CALIBRATE tab located underneath the CAPTURE/REAL TIME button (1). If the circle is not in the center, the screen will look like this (2).



(1)



(2)

Move the calibration slide to the center, click the CAPTURE button again, then the CALIBRATE tab (1). The screen should look like this if it is calibrated correctly (2). Then click on the image of the arrow to exit back to the CAPTURE screen. Now you are ready to view organisms, slides, take pictures, and record video.



(1)



(2)

TO TAKE PICTURES



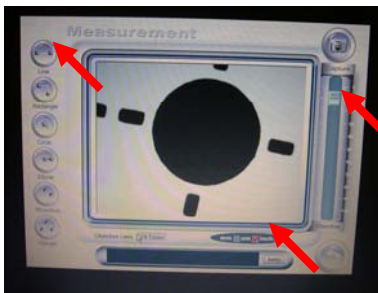
To capture images from the DigiScope, simply click on the capture icon. You can view your images in the Image Editor Program and decide whether you want to keep them or delete them.

MEASUREMENT

To measure an image on the screen, click the *CAPTURE* icon, then the *MEASUREMENT* icon (1). To measure this image, tell the program what the objective strength is (i.e. 20X) (2). Next, choose to measure an area shaped like a square, circle, rectangle, etc. or a straight line using the icons on the left side of the screen (2). Then choose to measure in inches, millimeters, or microns (2). Once you click on the measure type icon, click on the area on the screen you want measured. Once you have positioned the area you want measured, release the mouse, and the answer will show up at the bottom of the screen (3). If you want to keep this measurement on the captured image, choose the keep button, and your image will automatically be captured. To go back to the capture screen, choose the capture icon in the upper right corner (3).



(1)

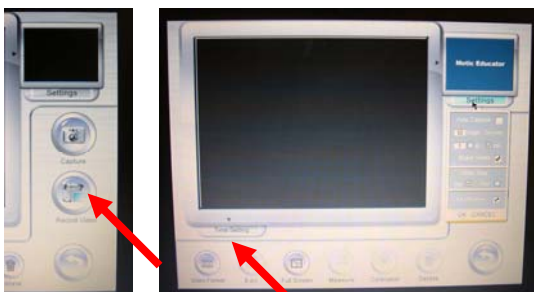


(2)



(3)

RECORDING VIDEO



(1)

(2)

To record video, click on the Record Video icon (1). A window will appear prompting you to name the video file and to choose where to save it (i.e. desktop, in a file, etc.). The video can record for up to 60 seconds, however, you can change the recording time by clicking on the time setting icon (2). The Video Format and Video Settings icons are automated and should not need to be altered.