DS-L2 Tissue Culture Microscope - Camera Control Unit

QUICK USE instructions:

For Brightfield,
- Blue fluorescence (e.g. DAPI, ex380/10 and em420/40nm)
- And Green fluorescence (e.g. FITC or GFP, ex480/10nm and em550LP)

1. Insert your USB stick into the digital camera unit.

2. Turn ON the microscope, intensilight, and digital camera unit (power switch at the right-hand side of the unit; green LED indicates that power is on).
   Set up the specimen under the microscope and switch the image to the camera port (to PHOTO - black knob at top RHS of microscope).

3. Right-click in top half of the screen. CAM menu appears.
   Four other menus that can be selected as alternatives to CAM: VIEW, REC, TOOL and SETUP. (The selected menu in yellow).

   ![CAM ADV 1 MENU Diagram]

4. Click on REC. Select drive D: (images you may take will be recorded in the USB stick).
   Toggle the file format to JPEG normal & highest resolution (1280 x 960 depends on camera).
   **NB: Only select BitMap for special quantitation as your image files will be large (14 Mb).**
5. Creating a folder for storing images on the USB stick (D: drive).
   a) Click SETUP > FILE SETTINGS and enter a directory name prefix into the MEDIA
      DIR box (by left-clicking on the alphabet at bottom of the screen (limit to your initials)).
      If you click AUTO, it will add the date to your folder name i.e. Xdmmyyyy.
      Click on SKIP to exit from the box.
   b) Enter a file name in the FILE NAME box (limit to 4 characters), but uncheck the
      AUTO box next to this. The image files will be called XXXX0001, XXXX0002 etc.,
      Click on SKIP to exit the box and click SAVE.

6. Click RETURN TO WINDOW.

7. Right click to restore menu.

8. Capturing an Image:
   a) Select CAM menu. Toggle between PROG, MANU, S-AE and F-AE and select
      MANU. (This enables adjusting the exposure time or the camera gain for an optimal
      image). Use left and right mouse buttons to toggle the increase/decrease in gain and
      exposure time.

   b) A conventional histological slide should have a white background. If it does not, click on
      WB (white balance).

   c) Select ‘1.3 mp’ (fast-frame rate mode) to search for a suitable area of the slide.
      (The CAM menu can be minimised and restored by clicking on the small button to the
      left of the button marked X).

   d) Select ‘5 mi’ (high-quality camera mode) and acquire the image using the ‘capture’
      button on front of the control unit.
      If ‘cap error’ is displayed, check that the Flash Card and USB stick are inserted
      properly.

9. Viewing Images:
   To view images go to the VIEW menu and select D:
   Your directory will be at the head of a list (to the right of a hollow yellow arrowhead).
   Click on the directory to see the files it contains.
   The button with four small rectangles toggles to a thumbnail gallery of the images.
   Unwanted images can be deleted by clicking on the X

10. Remove your images from the camera system at the end of each session.
    Turn the system off, remove your memory stick and take it to your own computer.
    Do not remove the memory flash card.

11. After use, SWITCH OFF the camera unit, the microscope, and intensilght lamp.
    Turn black knob on microscope back to BINO.