Imaging Systems

UVP Imaging System, new (PSC 543, 657, NSC 338, 460) No EtBr

Every time you use the any of the Imaging system, you MUST sign the logbook.
DO NOT use EtBr under any circumstances on the new UVP imaging sytem
Clean up any mess you make including wiping off the light box with H2O and paper towels.
Do not cut bands on the light box. On top of the box is a plastic tray, place your gel on the tray and then place on top of the transilluminator.
Be sure to turn off power when you are done.
Do not store any images on the hard drive.

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Turn all 3 off – camera, software and transilluminator

1. Turn on camera (right hand side, top near the back), and transilluminator.(right hand side, front, top of instrument). This will turn on the lower switch.
2. Place gel on transilluminator. Choose wavelength – 365, 302 (short wave selected in NSC imagers) or 254.
3. Monitor is touch screen. I find it easier to use the stylus or end of an unopened pen.
4. Double click on TS software icon. Once software comes up, press Live.
5. Select EXP WARN. This will tell you (yellow image) when the image is overexposed. You need to increase the exposure until you see yellow and then just backoff. This will get you the full dynamic range of the camera.
6. Adjust exposure using the large + or – buttons on the bottom right and left of screen. There are 3 levels – far right – milliseconds; middle – seconds; far left – minutes. Just touch level you need (the lt. purple bar will shift to the your selection). Touch + or – to increase or lower exposure time.
7. Or adjust image with rings on camera:
   a. Top ring – exposure
   b. Middle ring – zoom
   c. Bottom ring – focus
8. Press SNAP
9. To adjust image (invert, turn image), go back to Live. Select Preferences. Select PostProcessing tab (near the top).
10. Rotate image – use arrow to select; Invert – will change the image from black to white. OK.
11. Snap and now will see results of Preferences selection.
12. Press PRINT to print your image.
13. To save your image.
    a. Put a USB drive into USB port.
    b. Go to Preferences. Select Saving tab.
    c. Save images to: select usb
    d. Other selections do not change: autoprint – never; autosave – off; do not save images to computer or desktop
    e. OK
    f. Select save button on screen
14. Turn off ALL 3 – software, camera and transilluminator
15. Clean Transilluminator with H2O.
16. Turn off software – large X on lower left of window.

To Analyze UVP captured image using IQTL
1. Capture image on UVP.
2. Save as Tiff file. The image is in color scale even though it looks like gray scale. IQTL can only import Gray scale images.
3. Open the Tiff file in any graphic software, such as Photoshop or Irfanview (free download).

4. Convert the image from "color scale" to "Gray scale".
5. Save as different Tiff file name.
6. Open in IQTL.