

## Quick Reference Guide

For installation and setup of FluorChem R, M and E systems. For more detailed information on FluorChem system operation, please consult the User Guide located on the USB flash drive shipped with the system.

### Installing the FluorChem system

1. Unbox FluorChem system and place it on a lab bench. Allow 3 inches (7.6 cm) of clearance at the rear of the system.
2. Connect the power cord to the rear panel and plug the cord into a power receptacle.
3. Network access (optional). To access FluorChem system via a local network, connect an Ethernet LAN cable to the network (RJ-45 connector) port.
4. Turn on FluorChem system using the power switch on the rear panel.

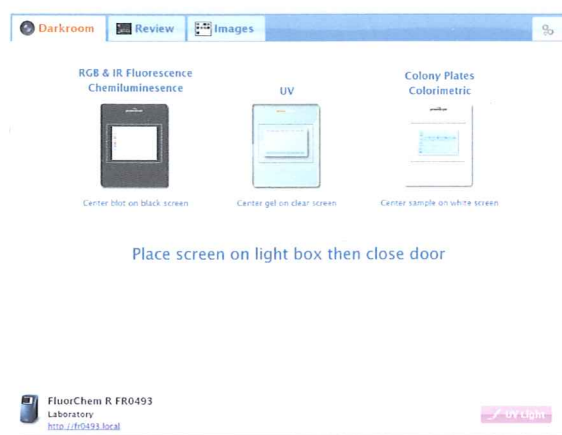


Figure 1

### Sample setup

1. Place the sample on the appropriate imaging screen and center it on the imaging area.
  - **Black Screen:** Epi IR, Epi fluorescent and chemiluminescent blot imaging
  - **Clear Screen:** UV-excited gel imaging (EtBr, SYBR and SYPRO stains)
  - **White Screen:** Colorimetric gel imaging (Coomassie blue, silver stain, colony plates)



Figure 2

5. Let FluorChem system equilibrate for 30 minutes after the initial power up. This allows the system optics to reach the optimum acquisition temperature of -25 °C.
6. When the system has finished initializing, the Door Open Screen (Figure 1) will display.

NOTE: ProteinSimple recommends leaving the FluorChem system power on when not in use.

2. Open the system door and place the sample screen on the UV transilluminator.
3. Upon closing the door, the system will automatically take an epi white light image of the sample and display it in the Darkroom Tab (Figure 2).
4. If needed, open the door and reposition the sample. The system will take a new white light image each time the door is closed.

The sample is now ready to be imaged.

## Image acquisition

1. Select the protocol drop-down menu (Figure 3) and choose the desired protocol.



Figure 3

2. Add or modify channel settings for desired excitation and emission wavelengths (Figure 4).

NOTE: The default **Auto Expose** and **Standard Resolution** settings are recommended for all imaging protocols. To image in Movie Mode, select **Movie**.

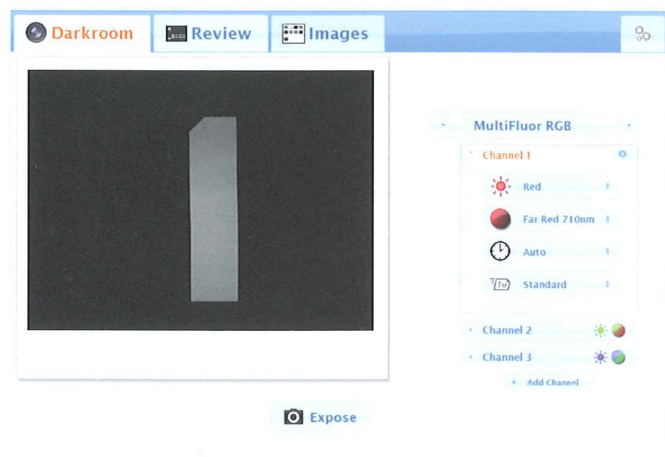


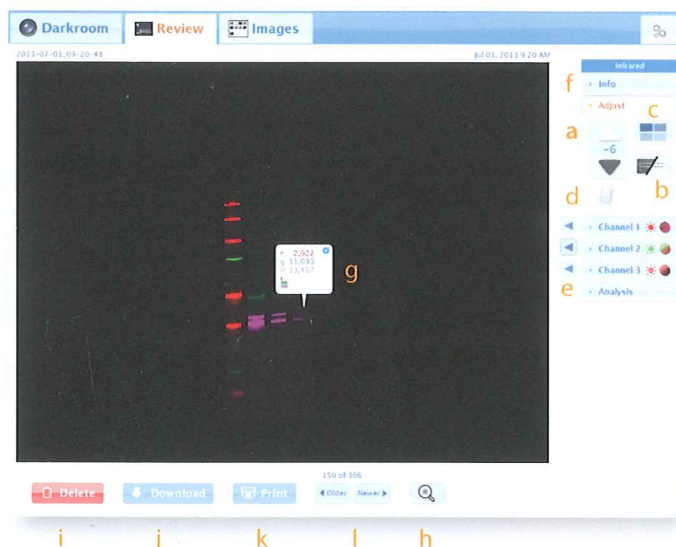
Figure 4

3. Select the **Expose** button to start image acquisition. Successively longer exposures will be taken automatically until the optimal exposure is found. Select **Stop** at any time to halt acquisition and save the last exposure taken.

NOTE: Images are automatically saved to the FluorChem system hard drive.

## Image review

The **Review** tab (Figure 5) will display when image acquisition is complete. In this screen you can:



- **Enhance:** Use the **Brightness Controls** (a) and **Invert** button (b) to enhance images if needed.
- **View Exposures:** Select the **Exposures View** button (c) to view and select from multiple image exposure levels. Select **Movie** (d) to view or edit Movie Mode clips.
- **Overlay:** Select the channel **Show/Hide** (arrow) buttons (e) to overlay channel image data.
- **Edit:** Select the **Edit** button (f) in the **Info** box to change the image title or enter additional information.
- **Display Pixel Values:** Select a pixel on the image (g) to display IR, RGB and/or grayscale pixel values.
- **Zoom:** Select the magnifying glass (h) to zoom in on the image.

Figure 5

- **Delete:** Select the **Delete** button (i) to move the image to the Trash page on the **Images** tab.
- **Copy/Download:** Insert a USB flash drive and select the **Copy** button (j). A folder containing the FluorChem data file (.fcz) and .png image files will copy onto the USB drive. Both formats can be opened in AlphaView software and saved as .jpg, .tif or .png files.
- **Print:** Select the **Print** button (k) to print directly to a compatible grayscale or color USB printer.
- **Browse:** Select the **Older/Newer** buttons (l) to view other stored images.

The **Images** tab (Figure 6) lets you view all images stored on FluorChem system. Just select an image to display it in the **Review** tab.

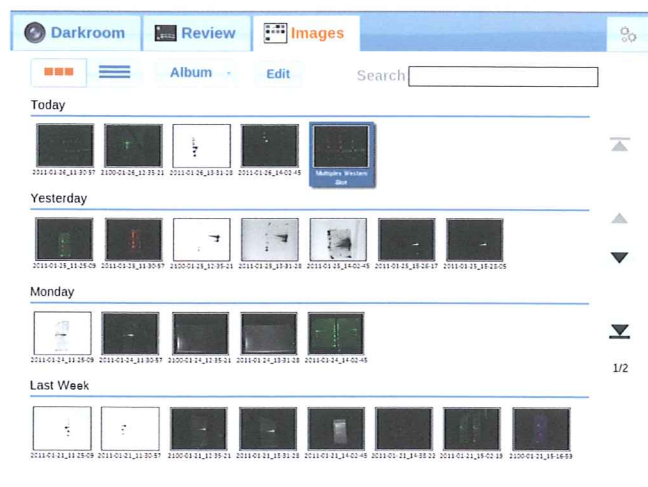


Figure 6



## Networking and remote access

Digital Darkroom allows users to control and monitor image acquisition, download files stored on the system or print images - all from a desktop computer or mobile device.

NOTE: Apple Bonjour® must be installed on Windows®-based computers and devices used to access the system remotely. Download and install **Bonjour Print Services for Windows** at [www.apple.com/support/bonjour](http://www.apple.com/support/bonjour). Bonjour is pre-installed on Mac, iPad and iPhone.

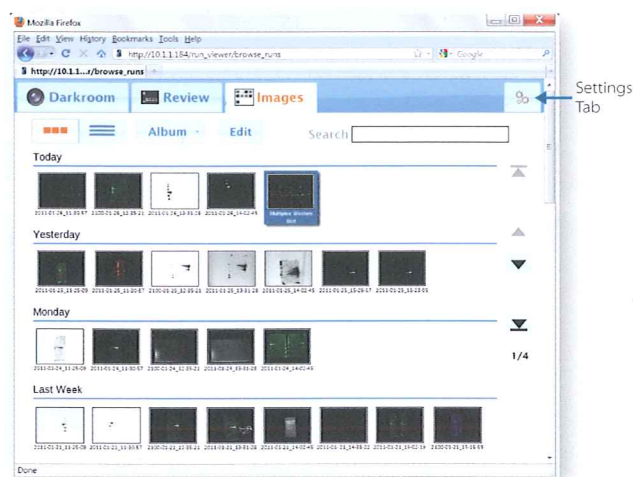


Figure 7

To connect to and access a networked FluorChem system:

1. Open a web browser on the remote computer or mobile device.
2. Enter the URL or current IP address for the FluorChem system in the browser. URL and IP addresses can be found on the **Settings** tab. The browser will expand the URL and display the **Images** tab (Figure 7).

The full remote interface will now be accessible.

NOTE: Selecting the Print button in the remote interface will print images to the local or network printer.

## Opening image files in AlphaView software

Image files can be opened directly in AlphaView software for post-acquisition analysis using a Windows-based remote computer.

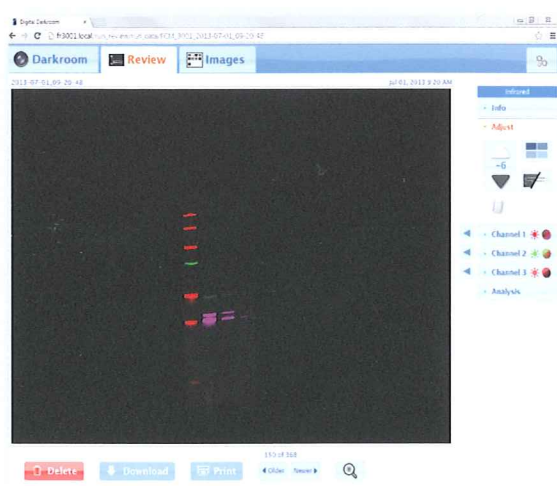


Figure 8

1. Select the **Download** button in the **Review** tab (Figure 8).
2. Select the **AlphaView** button in the download dialog box (Figure 9).
3. Follow the instructions in the browser dialog box. When download is complete, AlphaView software will launch and open the file.

NOTE: Some browsers may prompt for the location of the AlphaView software .exe file on the remote computer. If this occurs, select the Browse option in the browser dialog box. Browse to where AlphaView software is installed and select the **AIC.AlphaView.exe** file.

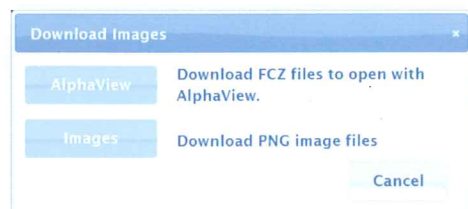


Figure 9

**proteinsimple**

Toll-free: (888) 607-9692  
Tel: (408) 510-5500  
Fax: (408) 510-5599  
[orders@proteinsimple.com](mailto:orders@proteinsimple.com)  
[proteinsimple.com](http://proteinsimple.com)