

Operating Instructions – Gel Imaging

Model and Manufacturer: FUSION-FX7.EDGE, Vilber

Safety:

- **UV radiation can be dangerous for unprotected eyes and skin, therefore we recommend the user to wear UV protective goggles to protect all skin surfaces.**
- **Do not touch the UV unit after UV exposure. There is a risk of skin burn.**
- **Do not open the instrument door during imaging operation.**
- **Do not use gloves when using the computer.**
- **Inform the Core Facility staff for any safety issue or misuse of the instrument.**

1. Start

1.1 Switch on the Gel Imaging instrument to preheat 10 mins before use. Turn on the computer.



Main Switch(Off Position)

1.2 Log in to the Bookitlab system and activate the software (Evolution-Capt Edge).

2. Position The Sample

2.1 Each application must be used with a specific sample tray. The Fusion imaging system supports the following sample trays.

Application	Samples	Tray
Chemiluminescence	Blot Titer plate Plant	Black tray Black tray Black tray
UV fluorescence (transillumination)	Gel or any UV transparent sample	UV-Pad or UV transilluminator (1)
Blue fluorescence (transillumination)	Gel or any transparent sample	Sky-Pad or blue conversion screen (1)
Spectra fluorescence (EPI blue, green, red, IR)	Gel	Spectra-Pad or black tray (1)
Colorimetric (White light transillumination)	Gel	White-Light-Pad or White light conversion screen (1)

3. Choose The Application Type

3.1 The Application Selector

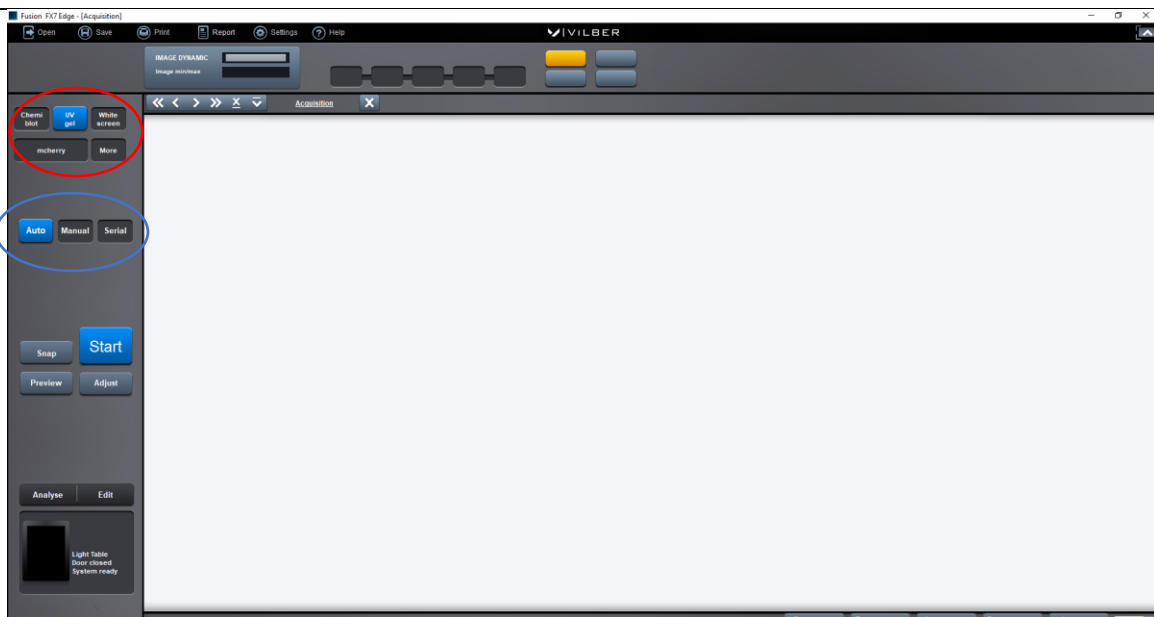
3.1.1 On the top left side of the software (red circle), several applications can be selected including chemiluminescence, UV fluorescence, and fluorescence.

3.1.2 You also can click **More** to look for more application or edit your personal application (as the second picture shows below).

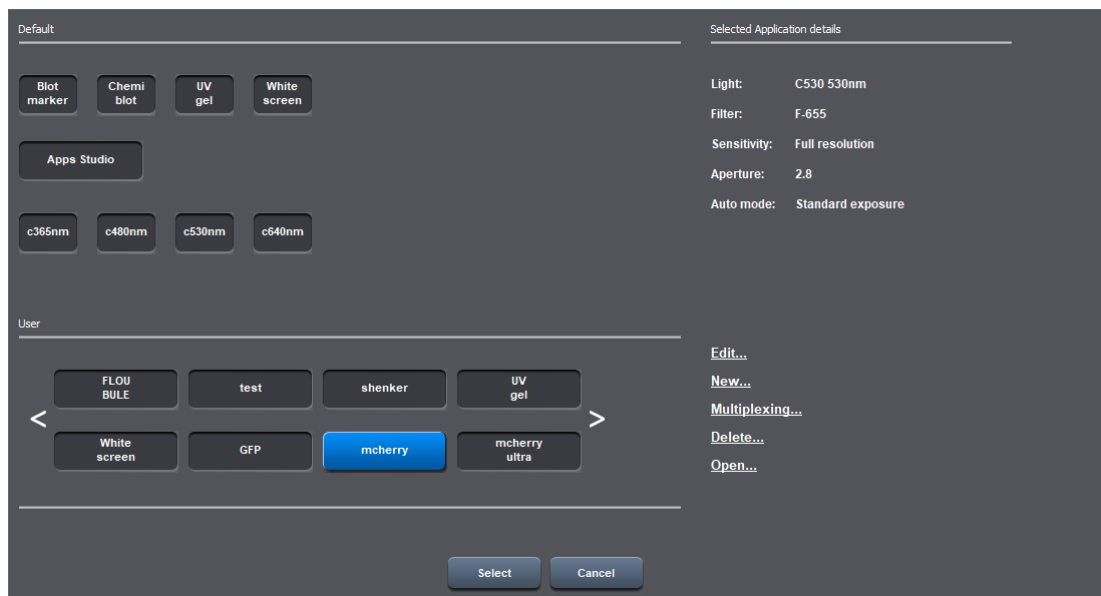
3.2 Define the exposure mode(blue circle)

3.2.1 The Auto exposure mode is the most popular for users.

3.2.2 You can also choose Manual or Serial mode to edit your exposure mode.



Main Interface of the software



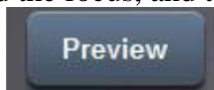
More applications to select or edit

4. Acquire The Image

4.1 Click Start to process the image acquisition.



4.2 Click Preview to adjust the aperture and the focus, and to position your sample.



5. The Image Display

5.1 Access the Image Display from the main software window, you can select one from the 5 image display presets.



Image Edit Window



5.2 You may select one of the function on The Lower Image Tab to process the picture that you got.



The Lower Image Tab

5.3 After processing the picture, click Save to save them. (to prevent data loss, it is best to store the pictures in disk D.)

6. Shut down

- 6.1 Withdraw the sample and trays (If you used).
- 6.2 Turn off the software as well as the computer.
- 6.3 Switch off the Gel Imaging instrument.