



超低溫影像 擷取系統

ImageQuant™ LAS4000 mini

生物醫學研究所
張嘉哲教授實驗室
生科大樓1106室
(04)2284-0896#115

規格

- **F0.85 焦距 43 mm 高靈敏度鏡頭**
- **最大樣品尺寸 18 x 12 公分**
- **曝光時間 1/100 秒 ~ 2小時**
- **冷光影像擷取**

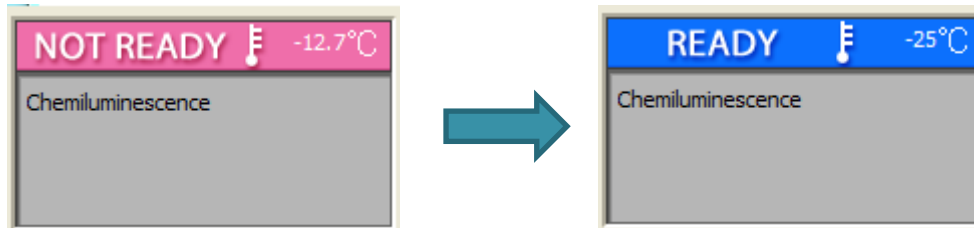
使用流程-I

1. 開啟ImageQuant™ LAS4000 mini
主機電源及電腦電源

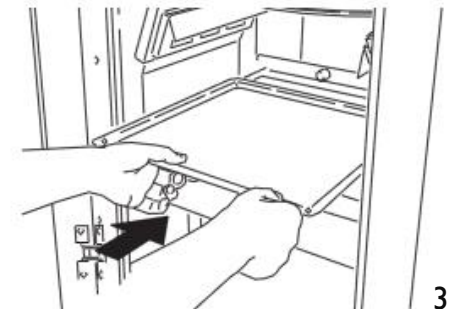
2. 點選電腦桌面上快捷鍵



3. 待CCD降溫至-25°C藍色狀態(ready)



4. 將樣品放置於專用盤上，
置入樣品平台



使用流程-2

The screenshot shows the ImageQuant LAS 4000 software interface. The left sidebar contains several control panels: 'Exposure Type' (Increment), 'Interval Time' (Manual, 10 sec), 'Sensitivity / Resolution' (Standard), 'Repeat Limit' (Set Limit), 'READY' status (-25°C), 'Chemiluminescence' display, and 'Flat frame' (Auto). At the bottom, there are three buttons: 'Method/Tray position', 'Focusing', and 'Start'. A red box highlights the 'Start' button. Three callout boxes provide instructions: '1. 選擇擷取方式 樣品平台高度' (Choose acquisition method, sample platform height) points to the 'Flat frame' panel; '2. 選擇亮度、焦距' (Choose brightness, focal length) points to the 'Focusing' button; and '3. 選擇影像擷取參數' (Choose image acquisition parameters) points to the 'Interval Time' panel.

3. 選擇影像擷取參數

1. 選擇擷取方式
樣品平台高度

2. 選擇亮度、
焦距

Start

使用流程-3

Method / Tray position

Method

Chemiluminescence **擷取方式**
Chemiluminescence 冷光
Digitization 可見光

Fluorescence

Digitization

Epi-illumination White (Epi-illumination)
 Trans-illumination White (Trans-illumination)

Tray position

0
 1
 2
 3 NP

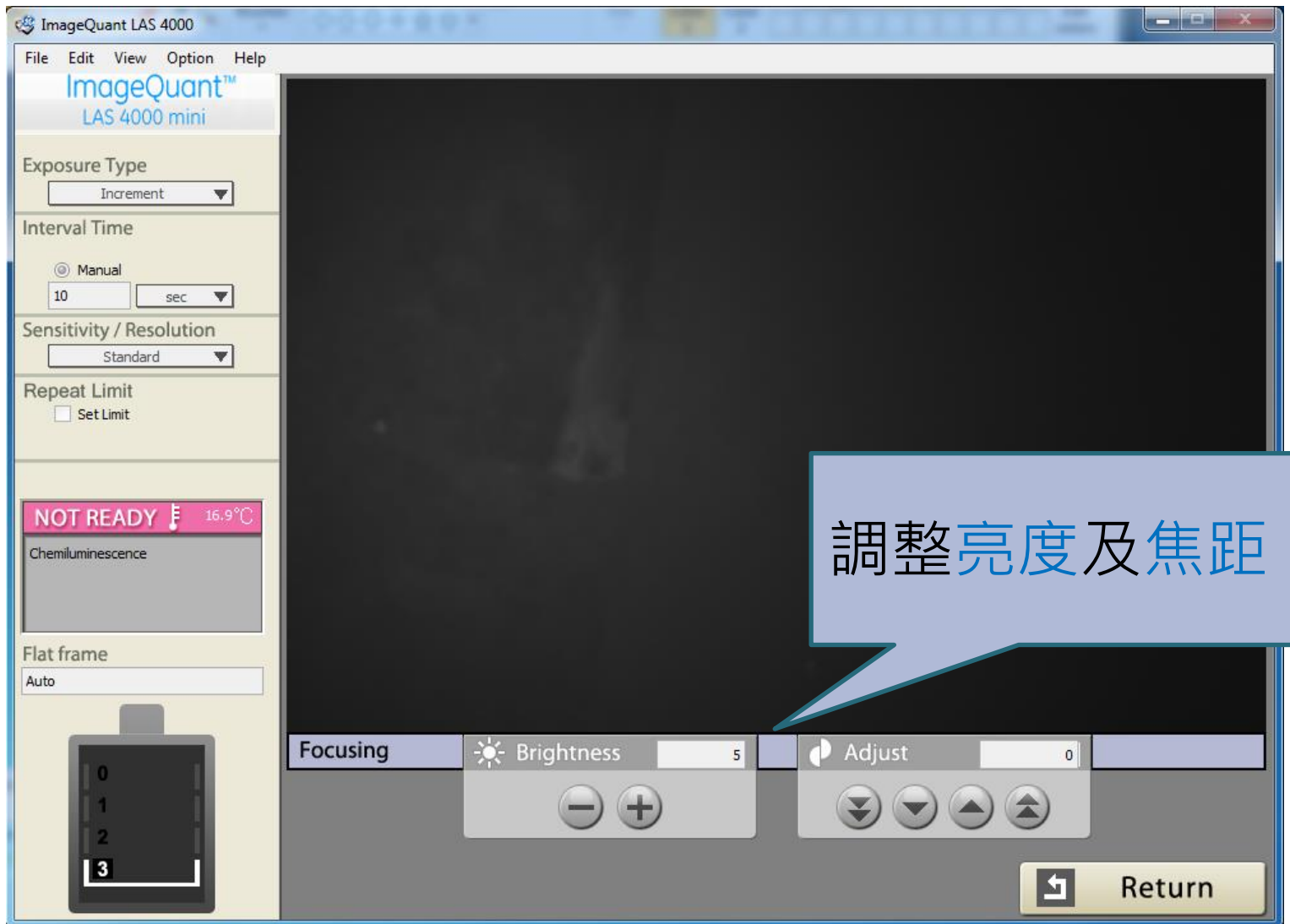
20 mm

OK Cancel

樣品平台高度
依樣品盤放置的平台選擇

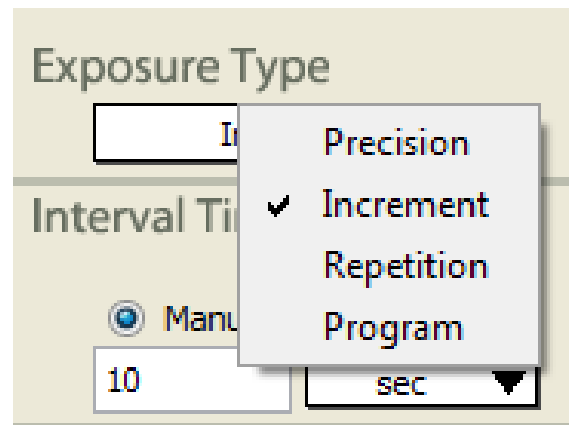


使用流程-4



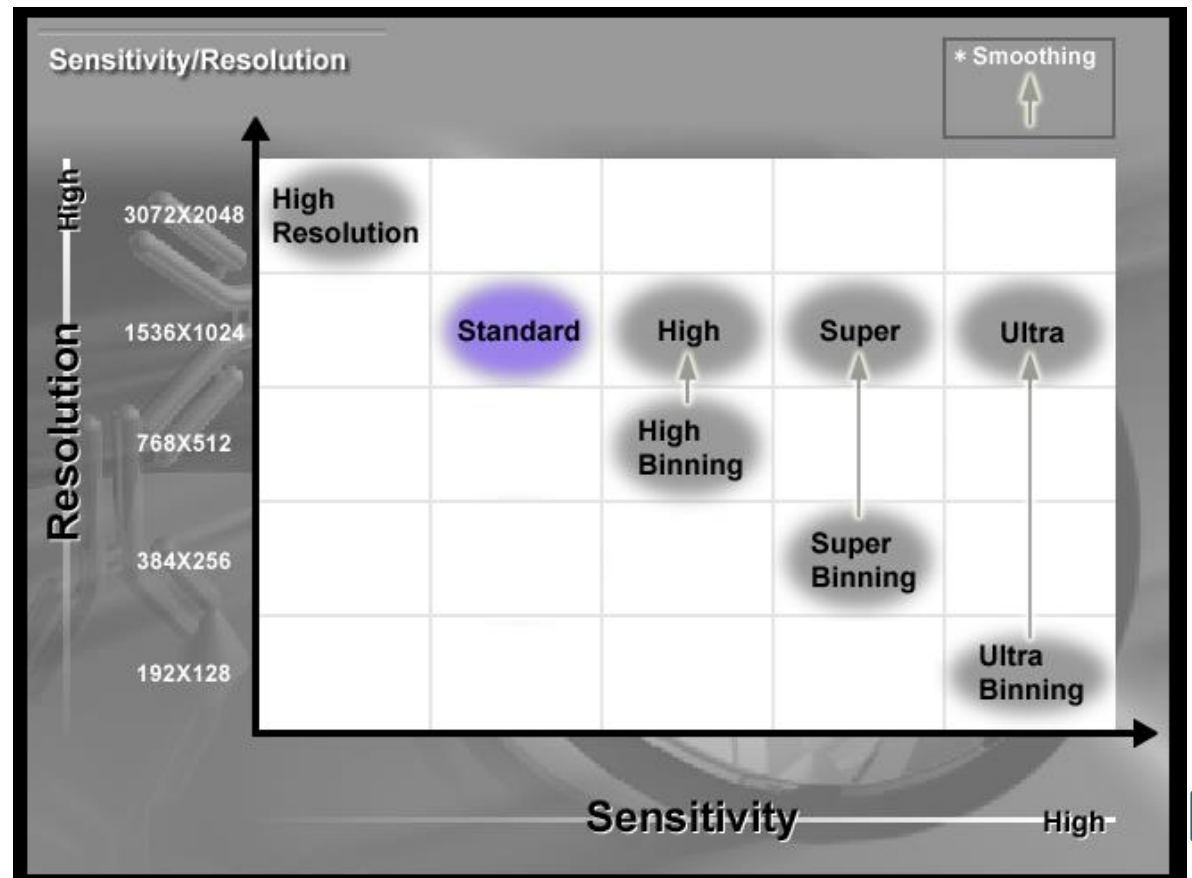
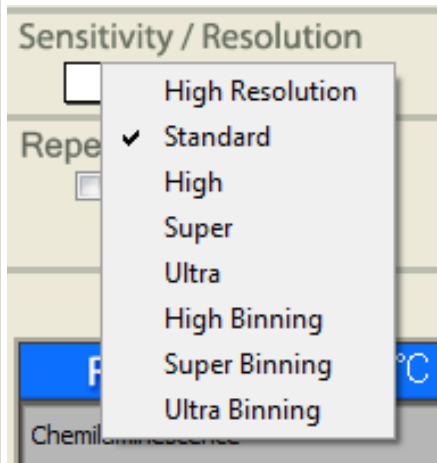
使用流程-5

- **Exposure type 曝光模式**
 - Precision 擷取特定時間下的單一影像
 - Increment 連續拍且訊號累加
 - Repetition 連續拍但訊號不累加
 - Program 程式編輯



使用流程-6

- Sensitivity/Resolution 靈敏度/解析度



使用流程-7

The screenshot displays the ImageQuant LAS 4000 software interface. On the left, there is a control panel with the following settings: Exposure Type set to 'Precision', Exposure Time set to '10 sec' with 'Manual' selected, Sensitivity / Resolution set to 'Standard', and 'Add Digitization image' set to 'ON'. Below this, a status bar shows 'READY' and '-25°C', and a 'Chemiluminescence' section. At the bottom left, a 'Flat frame' is set to 'Auto' and a camera view shows a slide with frame 3 selected.

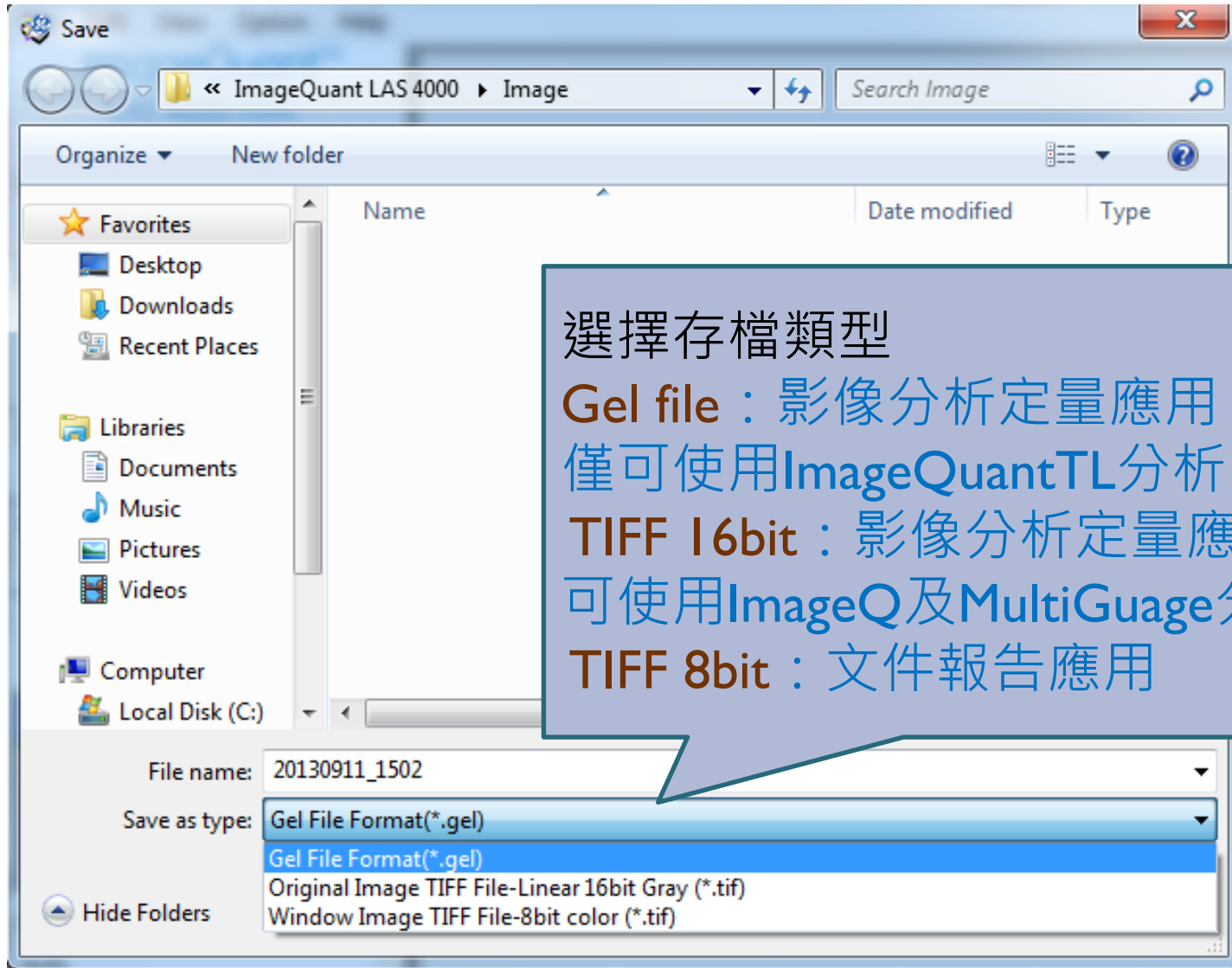
The main window features a 'Save Function' dialog box with the following options:

- Save selected images (1 - 1)
- Save displayed images
- Make integrated image
- Save passed images (Up to 84 images)

A 'Comment' field is also present.

At the bottom right, there are three buttons: 'Print', 'Save', and 'Complete'. A blue callout box with the text '1.調整對比及飽和度' (Adjust contrast and saturation) points to the 'Save' button. Another blue callout box with the text '2.存檔' (Save) points to the 'Save' button.

使用流程-8



使用流程-9

- 6.取出樣品盤、將盤上殘餘buffer
擦拭乾淨
- 7.關閉視窗(選擇Stop cooling CCD)
- 8.確定機台上的Busy燈熄滅後，
關閉機台電源

開放時間

- 週一至週五 10:00~15:00
- 每位使用者限定預約1小時
- 最晚前一天需來電預約使用時間
- 首次操作務必請張嘉哲實驗室成員協助操作

- 儀器聯絡人：
林韋丞 生科大樓1106室
(04)2284-0896#115