LabView+Symphony 安裝程序

目的:

使用自行撰寫的 LabView 程式來操作 Symphony CCD。

簡介:

1. Symphony CCD 可使用套裝軟體 LabSpec 或 SynerJY 操作,也可自行撰寫 LabView 操作介面。 理論上,若想用 LabView 操作,安裝 Symphony CCD Detector 驅動程式即可,但由於 LabView 程式碼需要用到一些 SynerJY 的 components,而這些 components 只有在安裝 SynerJY 時才會寫 入 windows system32 及 Jobin Yvon 資料夾,所以仍需安裝 SynerJY。

2. Symphony 操作使用網路連線,安裝前請先確定電腦有網路卡或無線網路等配備。

3. 安裝程序為:Symphony->SynerJY->測試 LabView 程式。本安裝程序無需啓動 SynerJY,也不需要 USB Key。

一、安裝 Symphony CCD Detector 驅動程式:

1. 從 JY FHR640 softwares 光碟或 Data Server 中,開啓 Symphony 資料夾的 Setup 程式,依指示開始安裝。(路徑 Z:\Lab Softwares\FHR640 softwares\Symphony)

開啓檔案	- 安全性警告
無法確認	28發行者,您確定要執行這個軟體? 名稱: Setup.exe 發行者: 發行者不明 類型: 應用程式 來自: Z:\Lab Softwares\FHR640 softwares\Symphony 執行(R) 取消
8	這個檔案沒有有效的數位簽章可以確認它的發行者,您應該只執 行來自您所信任發行者的軟體。 <u>要如何決定哪個軟體可以執行?</u>

InstallShield Wizard
Choose Destination Location Select folder where Setup will install files.
Setup will install Symphony in the following folder.
To install to this folder, click Next. To install to a different folder, click Browse and select another folder.
Destination Folder
C:\Program Files\Jobin Yvon\Symphony Browse
InstallShield

2. 選擇 CCD table files 安裝位置,預設為 C:\Program Files\Jobin Yvon\Symphony\CCD1。注意: 之後在 SynerJY 設定 detector 時要將路徑指向同一位址。

InstallShield Wizard	X
Choose Destination Location Select folder where Setup will install files.	2
Please select target path for Symphony table files. Accept or edit the following folder name, or browse for an existing folder to overwrite the contents.	
C\Program Files\Jobin Yvon\Symphony\CCD1	
選擇CCD table存放位址 Browse	
InstallShield	
< Back Next > Cancel	

3. 設定網路連線。Symphony CCD 需透過網路連線控制,預設電腦 ip 位址為 172.16.0.2。 (Symphony 主機 ip 為 172.16.0.1,所以將安裝電腦設定為同一網域 172.16.0.x,x 為 0-255 間任 一非1整數。)

🐝 Setup Symphony Cor	nfiguration
Available Network Cards:	區域連線
Network Card Status:	Media disconnected
Symphony IP Address:	172 . 16 . 0 . 2
	Set As Symphony Configure manually at a later time

4. 按下 Set As Symphony 即完成 Symphony 軟體安裝。

Inst	allShield Wizard		×
C	Choose Destination Locati Select folder where Setup wi	on I install files.	
	🏂 Setup Symphony Conf	iguration	
	Available Network Cards:	區域連線	•
	Network Card Status:	SymphonySetup	
	Symphony IP Address:	Symphony successfully configured. 確定	ure manually at a later time
Insta	allShield	< Back	Next > Cancel

InstallShield Wizard		
	InstallShield Wizard Complete Setup has finished installing Symphony on your computer.	
	< <u>B</u> ack Finish Cancel	

二、安裝 SynerJY:

1. 從 JY FHR640 softwares 光碟或 Data Server 中,開啓 SynerJY 1.8 資料夾的 Setup 程式,依指示開始安裝。(路徑 Z:Lab Softwares\FHR640 softwares\SynerJY 1.8)

💹 Setup SynerJY		
Svner.JY 1.8.0.0		
<i>Synth</i> 2 101010		
	Setup SynerJY	
	Setup Status	
	SymerJY Setup is performing the requested operations.	
	Installing:	
	C:\WINDOWS\system32\iProfessionalLibrary.ocx	
	16%	
	InstallShield	
	Cancel	

2. 安裝完會要求拔除 SynerJY 的 USB key,可忽略此訊息。(使用 SynerJY 操作軟體需要購買 Software Key,但本次安裝目的只是要安裝 JY 的一些 conpoments,無需用到 SynerJY 操作軟體)



3. 重新啓動電腦。

Setup SynerJY	
	InstallShield Wizard Complete The InstallShield Wizard has successfully installed SynerJY. Before you can use the program, you must restart your computer. 重新啓動電腦 • Yes, I want to restart my computer now • No, I will restart my computer later. Remove any disks from their drives, and then click Finish to complete setup.
	< Back Finish Cancel

4. 設定參數。僅需設定 Detector 部份。

InstallShield Wizard	X
Configure devices Would you like to configure devices now?	
● Configure devices now. <mark>設定參數</mark>	
Load device configuration from a disk.	
Configure devices later.	
InstallShield < <u>B</u> ack <u>Next></u>	Cancel

🌆 Device Configuration	X
Device type Choose device type	
設定Detector即可	
Accessory Detector Light Source Monochromator	
Click Cancel To End Device Configuration	
Jobin Yvon < <u>Back</u> Next >	Cancel

5. 選擇 Detector->Multi-Channel Detector->Symphony

Jy Device Configuration	×
Device sub-type Choose device sub-type.	
Multi-Channel Detector	ctor
Single-Channel Detector	
Jobin Yvon	
< Back Ne	xxt > Cancel
🔏 A Multi Channel Detector	×
Communications Parameters	
Controller Special Types ID Symphony O Communications Type	IP
Port Number	4321
Hardware identifier	Symphony
Serial settings Baud rate Stop bits Parity Da	ta bits
19200 💌 1 💌 No Parity 💌	8
<上一步(B)	下一步 00 > 取消

6. 在 Table File Directory 欄位,輸入 Symphony CCD table 存放位置。以步驟一之 2 爲例,爲 C:\Program Files\Jobin Yvon\Symphony\CCD1。

🔏 Symphony	X
Selected Controller Type Symphony	
If you know the existing table file path on your PC, enter it in the following dialog box. If you don't know the location or would like to copy to a new location, you can use the Search and Copy functions below.	
Table File Directory (Copy Destination) C:\Program Files\Jobin Yvon\	
Table File Search CCD Table Files Search Directory (To Install from CCD Installation CD, please insert the CD, select the 輸入Symphony CCD table存放位置, 例如IC:\Program Files\Jobin Yvon\Symphony\CCD	1
Results:	•
Copy From:	
Сору	
<上一步(B) 下一步(D) ▶ 取消	

7. 套用之後即完成設定。

Symphony	
Summary	
	-
Device ID: CCDT Device Class: jyDevClassDetector Device Type: jyDevTypeMCD	
Communication Settings: Type: TCPIP Port number: 4321 Device Name: Symphony Baud rate: 19200 Parity: No Parity Stop bits: 1 Data bits: 8	
	取消

8. 回到硬體設定畫面,選擇取消,結束 SynerJY 設定。不需要啓動 SynerJY。

Device Configuration
Device type Choose device type
Accessory Detector Light Source Monochromator Units will end the device configuration session. Proceed? Click Cancel Tc
Jobin Yvon < Back Next > Cancel
InstallShield Wizard
Complete Installation is completed.
■ Launch SynerJY 取消勾勾, 不用啓動SynerJY
Einish Cancel

三、測試 LabVIEW 程式:

1. 使用最新版本的 Symphony LabVIEW Lib 2009/09/09,開啓 Spectral mode.vi。





2. 執行 LabVIEW 後,右方設定沒有任何資訊。

D Spectral Acquisition demo	
	3
	Settings Trigger In Multi-Accu Infos
Initialize	
	Integration time (ms) : 10
	Number of Areas : 1 Reformat Areas
Temperature	ADC 20 kHz Area Number to Display
CCD Busy	GAIN Gram U.b(x)
16000 -	

3. 選擇 Symphony, ID 會自動帶出 CCD1, 再按下 Initialize。

D Spectral Acquisition demo	
🔿 🕑 🔍 💷	2
Initialize Temperature Shutter enable CCD Busy	Settings Trigger In Multi-Accu. Infos Symphony Uniques ID <3> Integration time (ms): 10 Number of Areas: 1 ADC 20 kHz Area Number to Display GAIN Gain 0.6(x) 0
16000	

Spectral Acquisition demo			
Initialize Temperatur Shutter enabl	Initializing	Settings Trigger In Multi-Accu. Symphony Integration time (ms): 10 Number of Areas: 1 ADC 20 kHz GAIN 2 Gain 0.6(x)	Uniques ID CCD1 Reformat Areas Area Number to Display
CCD Bus 16000 - 15000 -			

4. 初始化成功後,按下溫度顯示的燈號,可讀到 CCD 現在溫度,表示 LabView 與 CCD 有成功連線。

D Spectral Acquisition demo	
Initialize	Initialized !
Setup	Temperature nutter enable CCD Busy
16000 - 15000 -	

5. 按下 Setup,會出現 Acquire 和 Continuous。勾選 Continuous 可偵測即時影像,按下 Acquire 可取得數據。

