WARNING: Do not swap different models {8452A, 8453} with any given computer; a swap must be with a like model, i.e. $8452A \rightarrow 8452A$, <u>OR</u> $8453 \rightarrow 8453$. (Swapping dissimilar models requires reconfiguration for the entire computer system)

Step 1 (Agilent I/O Configuration)

• Open Agilent IO control (though the exe is found here: "C:\Program Files\Agilent\IO Libraries\bin\iprocsvr.exe", it needs to be opened from the system tray icon).

⑦ ♥ ■ ◎ 10 ← ─ ○ Right-click and select "Run IO Config"

Image 1

This will open the "Agilent IO Libraries Configuration" (*Go To Step 2*)

Step 2 (Agilent IO Libraries Configuration)

The "Agilent IO Libraries Configuration" tool should open: (...and look like this:)

齈 Agilent IO Libraries Configuration - IO Config		
<u>File Options Help</u>		
IO Config configures and edits Agilent IO interfaces. - To configure a new interface, select the interface - To edit a configured interface, select the interface - To automatically configure the interfaces identified Available Interface Types	in 'Available Interface Types' and click 'Configure' in 'Configured Interfaces' and click 'Edit' d with '*', click 'Auto Config' Configured Interfaces	
VISA TypeInterface DescriptionASRL*RS-232 COM PortsASRLVISA LAN Client (e.g. E5810)GPIB*82350 PCI GPIB CardGPIB82341 ISA GPIB CardGPIB82357 USB to GPIBGPIBVISA LAN Client (e.g. E5810)GPIB-VXIGPIB-VXI Command ModuleTCPIP*LAN Client (LAN Instruments)VXI*E8491 IEEE-1394 to VXIn/aLAN Server (PC as Server)	GPIB0	" <u>Auto Config</u> OK <u>H</u> elp
Configure * NOTE: Auto Config will configure interfaces identifier	Edit <u>B</u> emove	

Image 2

•

- On the right pane for "Configured Interfaces", double left-click the VISA Name GPIB0.
 - If there is no GPIB0 for Configured Interfaces" then click on Available Interfaces Types: "82350 PCI GPIB Card, that will then add the correct GPIB card (82350 PCI GPIB Card).
 - Note that each GPIB PCI card has it's own unique serial number. If the GPIB PCI card has been changed out, or if the computer has been reimaged, it will be necessary to reconfigure the GPIB card with this utility (Agilent IO configuration).
 - <u>Resist</u> the temptation to click on "*Auto Config" ← DON'T DO IT!
 - (If you do this, you will end having to clean a bunch of stuff out of the Configured Interfaces)
- Go To Step 3

Step 3 (82350 PCI GPIB Card Configuration)

82350 PCI GPIB Card Configuration	×	
Questions? Press the Help b Recommended default value	outton below. s are shown.	
Serial Number: US43090453		
SICL Interface Name: hp82341		"hp82341"
(for backwards compatibility use 'hpib7')		
VISA Interface Name: GPIB0	Cancel	
Logical Unit: 7	Help	
Bus Address: 30 🕂	Defaults	
System Controller	Edit VISA Config	
Image 3		

- The SICL name may read GPIB0, this will need to be changed!
 - Change it to "*hp82341*" --*as pictured*.
 - IT HAS TO BE THIS WAY; NOTHING WILL WORK OTHERWISE. DON'T THINK YOU CAN OUTSMART THE SYSTEM!
- The Default for Logical Unit = 7
 - leave it at 7, or change it to 7 if need be –there should be "no-need-be", if there is, beware!
- The Default Bus Address is 21; this can be changed to 30. In fact, change it to 30 so that it is consistent among all Diode Arrays.
- Click on "Edit VISA Config"
 - this will show devices
 - this will determine if the diode array is being picked up by the GPIB card –assuming the diode array is turned on (powered on).
- Go To Step 4

Step 4 (Show Devices)

(Information gathering only)

•

- Show Devices is to see if the GPIB card is picking up the Diode Array –assuming it is powered on.
- Make note of the interface assignment; in this example, the diode array has been assigned interface 25 [GPIB0::25]
 - Interface 25 is the default for Diode Arrays
 - please note that the interface # is controlled by DIP switches on the diode arrays back panel.



Image 4

Image 5

- If there's no instrument in the device list, see image 4, then it will need to be added.
- Click on "Auto Add devices"
- Go to Step 5

Step 5 (Auto-Configuration)

Auto Configuration		X			
Ready to Perform Auto Configur	ration on interface:	<u>Continue</u>			
GPIBO		Cancel			
Make sure all instruments on this interface are turned on and ready to go. This operation will touch each instrument on this interface.					
This operation may take severa	l seconds.				
On a remote GPIB interface ove may take longer.	er the LAN, this operation				
		Test.			
Auto Configuration Complete		×			
GPIBO					
The following devices were previously identified:	The following new devices w found:	vere			
GPIB0::25	< <no devices="" found="" new="">></no>				
	OK				

• The instrument should be picked up –assuming all of the configurations were followed through from the previous steps-- add that device by selecting it and clicking OK.

Step 6 (VISA Assistant)

(Checking that the instrument is properly registered)

VA VISA Assistant -	
<u>Eile Edit View Configure H</u> elp	
GPIB0 GPIB0::25::INSTR	
No Instrument Driver Configured Address String: (rsrcName)	
Configure: Primary Address: 25	
For Help, press F1	6:01 //

• Double check the VISA Assistant configuration, by looking at what the arrows are pointing to [

Step 7 (Open UV-VIS ChemStation)

Open UV-Vis Configuration Editor
 C:\HPCHEM\UVEXE\SETUP.EXE

	1	Programs >		Accessories	•		
nal	Ì	Documents •	•	Agilent IO Libraries	•	L	
ssio		Settings		Startup	•	 153	Add Licenses
rofe		Search 🕨		Vxipnp	Þ	*	G1115A
XP	•	Help and Support		Remote Assistance SumatraPDF		<u>e</u>	Installation Qualification Instrument 1 offline
ows		Run	Ē				Instrument 1 online
Wind	0	Shut Down					ReadMe UV-Vis Configuration Editor

- Go To Step 8 (A or B)
 - \circ 8A = HP 8452A
 - 8B = Agilent 8453

Step 8 A (Configure UV-VIS ChemStation) 8452A

• From the menu bar, click "Configure" \rightarrow Instruments

i C	onfiguratio	on Editor			
File	<u>C</u> onfigure	<u>A</u> dd/Delete	<u>U</u> tilities	Help	
				845x UV-Visible System[1] [Instrument 1] UVVis Spectrophotometer 8452A GPIB 25 ▼	

Select Instrument
Instrument Type:
UVVis
Instrument Name:
845× UV-Visible System[1]
Initially Start Instrument Session?
CYes CN0
Initial Screen Window Size:
Normal Cloon C Full screen
OK Cancel <u>H</u> elp
845x UV-Visible System[1] - Device Configuration
845x UV-Visible System[1] - Device Configuration
845x UV-Visible System[1] - Device Configuration
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB CLAN
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB OLAN Spectrophotometer 8452A GPIB Address: 0
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB CLAN Spectrophotometer 8452A GPIB Address: 0
845x UV-Visible System[1] - Device Configuration UVVis Modules © GPIB ○ LAN Spectrophotometer 8452A 8453 Temp.Control ▼ <u>A</u> dd
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB OLAN Spectrophotometer 8452A GPIB Address: 0 Add
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB CLAN Spectrophotometer 8452A GPIB Address:
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB OLAN Spectrophotometer 8453 Temp.Control Selected Modules Spectrophotometer 94520 CPID 25 Delete
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB CLAN Spectrophotometer 8452A GPIB Address: O Add Selected Modules Spectrophotometer 8452A GPIB 25 Delete
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB CLAN Spectrophotometer 8452A GPIB Address: Add Selected Modules Spectrophotometer 8452A GPIB 25 Delete
845x UV-Visible System[1] - Device Configuration UVVis Modules GPIB CLAN Spectrophotometer 8453 Temp.Control Selected Modules Spectrophotometer 8452A - GPIB 25 Delete
845x UV-Visible System[1] - Device Configuration UVVis Modules Spectrophotometer B452A B4533 Temp.Control Selected Modules Spectrophotometer B452A GPIB 25 Delete
845x UV-Visible System[1] - Device Configuration UVVis Modules Spectrophotometer B452A GPIB Address: O Add Selected Modules Spectrophotometer B452A GPIB 25 Delete OK Cancel Help
845x UV-Visible System[1] - Device Configuration UWis Modules Spectrophotometer 8453 Temp.Control Add Selected Modules Spectrophotometer 9452A OK Cancel Help

- The "Instrument Name" can be left as default "845x UV-Visible System[1]
- Double check all the settings for the 8452A (Doide Array) on GPIB Address: 25

From the menu bar, click "Configure" → GPIB
 ○ Double check that the GPIB card is "hp82341"

2 ouore eneen a	at are of 12 cara is inposo if	
Configure: GPIB Card		×
GPIB <u>C</u> ard:	hp82341 🔽 🖛	
ОК	Cancel <u>H</u> elp	

Step 8 B (Configure UV-VIS ChemStation) 8453

• From the menu bar, click "**Configure"** → **Instruments**

	Configuratio	on Editor			
Eile	e <u>⊂</u> onfigure	<u>A</u> dd/Delete	Utilities	Help	
		- Monthelere		845x UV-Visible System[1] [Instrument 1] UVVis Spectrophotometer 8453 GPIB 25	

Select Instrument
Instrument Type:
UVVis
Instrument Name: 845× UV-Visible System[1]
Initially Start Instrument Session?
CYes CNo
Initial Screen Window Size:
⊙Normal Clcon OFull screen
OK Cancel <u>H</u> elp

• The "Instrument Name" can be left as default "845x UV-Visible System[1]

- 845x UV-Visible System[1] Device Configuration Х U₩is Modules GPIB O LAN Spectrophotometer . 8452A GPIB Address: 0 8453 Temp.Control <u>A</u>dd Selected Modules Spectrophotometer Delete 8453 GPIB 25 0K Cancel <u>H</u>elp
- Double check all the settings for the 8453 (Doide Array) on GPIB Address: 25

From the menu bar, click "Configure" → GPIB
 ○ Double check that the GPIB card is "hp82341"

Bouble chech u		
Configure: GPIB Card		×
GPIB <u>C</u> ard:	hp82341 💌 🖛	
ОК	Cancel <u>H</u> elp	

Troubleshooting

• Make sure Windows Device Manager is picking up the GPIB PCI card and that it is working properly.



DIP Switches

(The Diode Array should be turned off if making changes to the DIP switch)

8453 DIP Switch setting for bus #25



8452A DIP Switch setting for bus #25

