Modal Amplified Software – Renaming Hardware

1. **Install Modal Amplified software** - it is recommended that you **do not** attach modal hardware/cabling to the pc during installation

2. Connect hardware to PC - Launch NI Maxx

After installation of Modal Amplified, connect modal hardware to PC. When encountering RDI modal hardware for the first time, you will see a National Instruments menu appear as shown below. Select "Go" to configure the hardware. If this message is not seen, manually launch NI Max software using Windows search bar.

[Display properties might need to be adjusted to see the small font!]



Note! If NI Max software is very small, try the following:

- Increase scaling factor of your display temporarily or...
- Close NI Max, then:
 - Using File Explorer, navigate to C:\Program Files (x86)\National Instruments\MAX\
 - Right-click on NIMax.exe, select Properties->Compatibility->Change high DPI settings.
 - Select Override high DPI scaling behavior/Scaling performed by:
 - Choose **System** from drop down.

Security	Details	Previous Versions		
General	Compatibility	Digital Signatures		
f this program isn't wo running the compatibi	rking correctly on this vers ity troubleshooter.	ion of Windows, try		
Run compatibility	troubleshooter			
How do I choose com	patibility settings manually	Aligh DPI settings for NIMax.exe		
Compatibility mode		Choose the high DPI settings for this program.		
Run this program	n in compatibility mode for	Program DPI		
Windows 8		Use this setting to fix scaling problems for t instead of the one in Settings Open Advanced scaling settings	his program	
Settings		A program might look blurry if the DPI for your	main display	
Reduced color r	node	changes after you sign in to Windows. Window	is can try to f	
8-bit (256) color		set for your main display when you open this p	the DPI that's rogram.	
Due in 640 - 490		Use the DPI that's set for my main display whe	n	
	screenresolution	I signed in to Windows \sim		
Disable fullscreen optimizations		Learn more		
Run this program	has an administrator			
Register this pro	gram for restart	High DPI scaling override	_	
Use legacy disp	lay ICC color managemen	Override high DPI scaling behavior.		
Change hig	n DPI settings	System	J	
Change settin	os for all users			
- Chunge bound	go tor an abore	OK	Cancel	
		NAMES OF A DESCRIPTION OF A DESCRIPTION OF A DESCRIPTIONO		

Expand the Tree in upper left corner – again, expand "Devices and Interfaces" as shown.



Note – if you see multiple NI cDAQ-9174 entries, simply right-click/delete entries with the red 'X', as shown.



Renaming the active NI hardware: if needed, rename the DAQ itself as shown below. Enter into "Name" field cDAQ1...then select Save. If already correctly named, skip this step!

NI cDAQ-9174 "cDAQ1	" - Measuremen	t & Automation	Explorer		
File Edit View Tools	Help	Reseat 😭 Self-Test			
 III cDAQ-9174 "cDAQ1" II: NI 9230 (BNC) "AI1" I: NI 9402 "DIO1" Network Devices Sales 	Setting	IS			
> 🔂 Software > 🔛 Remote Systems	Name		cD	AQ1	
	Vendor		Na	tional Instruments	
	Model		NI	cDAQ-9174	
	Serial N	umber	01	DE4FD8	
	Status		Pre	esent	
	Slot De	tails			
	Slot	Model	Name	Serial Number	
	1	NI 9230 (BNC)	AI1	01DF042F	
	2	NI 9402	DIO1	01B0513A	
	c h	ow empty clots			~

Drop down to the 9230 Card; rename as shown – enter **AI1** [Analog In 1], then select Save.

ile Edit View Tools	Help	
My System My System Data Neighborhood	Settings	els 🛞 Create Task :ﷺ Device Pinouts 🚳 Configure TEDS
	Name	Al1
	Vendor	National Instruments
	Model	NI 9230 (BNC)
	Serial Number	01DF042F
	Slot Number	1
	Status	Present
	External Calibration	
	Calibration Date	2/20/2019 13:33
	Recommended Next Calibration	2/20/2020 13:33
	Device Temperature	23.0°C

Drop to the 9402 Card; rename as shown – enter **DIO1** [Digital In/Out 1], then select Save.

My System	Save 🛱 Revert 🍬 Reset 😰 Self-Test 🛄 Te	st Panels 🙀 Create Task : 🎚 Device Pinouts	_
	Settings		
	Name	DIO	
	Vendor	National Instruments	
	Model	NI 9402	
	Serial Number	01B0513A	
	Slot Number	2	
	Status	Present	

Shaker card: if the Shaker card is present, continue the renaming process for this module; rename that card **AO1** (Analog Out 1), then select Save.

Upon completion, NI Max should reflect the following (ignore third card, 9260 if no Shaker card was purchased)



Exit NI Max – Modal Amplified is ready to go!

As long as your hardware doesn't change, this process will not be required again.

Troubleshooting:

- If hardware reflected within NI Max does not appear as described above, power down hardware and remove Modal-to-USB from PC
 - $\circ~$ Relaunch NI Max ~
- If hardware cannot be found, check Device Manager as shown below: attempt to update Driver



• If a rogue entry exists, such as shown below, delete it.

✓ ➡ My System > ➡ Data Neighborhood	🖬 Save 💦 Refresh 🖌 🗢 R	eset 🔀 Self-Test 🔲 Test Panels {💥 Create Tas
 Data Neighborhood Devices and Interfaces IN IcDAQ-9174 "cDAQ1" I: NI 9230 (BNC) "Al1" I: NI 9230 (BNC) "cDAQ2Mod1" I: NI 9402 "cDAQ2Mod1/aio: Al:Acceleration or Force I: NI 9402 "cDAQ2Mod2" Network Devices Software Software Remote Systems 	Settings Name Vendor Model Serial Number Slot Number Status	cDAQ2Mod1 National Instruments NI 9230 (BNC) 01DF042F 1 Present
	External Calibration	2/20/2019 13:33
	Calibration Device Temperature	23.0°C

File Edit View Tools Help			
🗸 🛄 My System	X Delete		
> 🚽 Data Neighborhood	A belete		
Devices and Interfaces			
W III cDAO-9174 "cDAO1"	Save as Virtual TEDS File		
1. NI 9230 (RNC) "AI1"			
All/ai0: All/Acceleration or Force	TEDS Properties	Values	
2 All/alo: AllAcceletation of Force	Model Number	86	.
J 2: NI 9402 DIOT	Version Number	3	
Network Devices	Version Letter	С	
> 🝊 Scales	Serial Number	43231	
> 🔂 Software	Sensitivity @ reference condition	2.230079E-3 V/N	
> 🔛 Remote Systems	High pass cut-off frequency (F hp)	5.000000E-3 Hz	
	Stiffness of transducer	1.000000E+6 N/m	
	Mass below gage	1.000000E-1 g	
	Sensitivity direction (x,y,z)		
	Transducer weight	1.000000E-1 g	
	Transducer Electrical Signal Type	Voltage Sensor	
	Mapping Method	Linear	
	AC or DC Coupling	AC	
	Polarity (Sign)	Positive	
	Reference frequency (F ref)	3.500000E-1 Hz	
	Reference temperature (T ref)	2.200000E+1 Deg C	
	Calibration Date	10/18/2021	
	Calibration Initials	EAD	
	Calibration Period (Days)	0 days	
	Measurement location ID	0	
	User Data		
			1