

World-Class Analytical Solutions and Service

Lumin Installation





Unpacking the Unit

- The Lumin can be lifted from the box by the handles in the side panels.
- Compare the contents of the shipping carton against the packing list.
- If any parts are defective or missing, contact Tekmar CSC.



Electrical Connections

- The GC/IO cable connection between the Lumin and the GC System. The 25-pin connector connects to the back of the Lumin and the 9 pin goes to either the remote input on the back of the GC or to a "y" splitter cable to split the start signal between the GC and the MS.
- The USB connection. The Lumin doesn't have a RS232 cable connection to communicate to the PC, it uses a USB.
- The Ethernet connection isn't used.
- The RS232 connection is for the connecting to the autosampler.

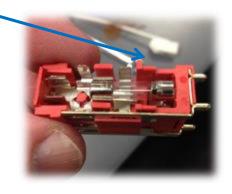




Electrical Connections

- Pop open AC fuse box and pull out the fuse holder.
- Place the fuses in the holder and note placement of the fuses.
- Place the holder back in the AC fuse box.







Pneumatic & Drain Connections

- The red drain line should be placed in an appropriate container making sure the drain line isn't submerged.
- Connect the sample gas line (blue) to the appropriate 99.999% pure He or N2 supply.



Agilent Injection Port Pneumatic Connections

- Cut the carrier gas line coming into the injection port about an inch from the bracket
- Connect the inside heated injection line to the line going into the injector.
- Connect the other nonheated line to the carrier gas line coming from the EPC



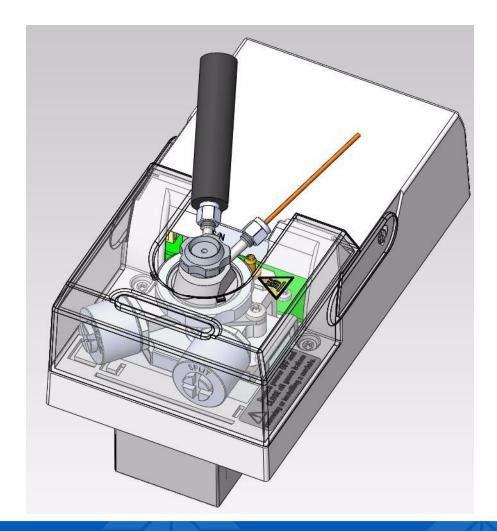
Agilent Injection Port Pneumatic Connections

• Be sure not to cut the septum purge line as it is 2mm tubing and you will either need to replace the weldment or purchase a 2mm union. The carrier line is the 1/16'' line that is welded to the flat surface of the injector body while the septum purge line is welded to a curved surface



Thermo Inlet Connection

- Install Thermo P&T Adaptor Kit
- Connect transferline to top connector if pointing towards the right





PE Inlet Connection

Carrier line is the 1/16" on the top or right.
Septum purge is 2mm on left or bottom.





Glassware Installation

 Remove the plastic placeholder from the mount and install sparge tube.



Glassware Installation

Push the glassware all the way up until it bottoms out and then back it out a couple mm before tightening.

The drain line should be positioned just above the frit.





- A Lumin TekLink software CD is included with the Lumin.
- The software revision number is listed on the outside of the disk.
- The Lumin User Manual is included on this CD as well as any peripheral software that may be needed.

- Obtain Administrator access to the host computer and install the software per the menu driven instructions.
- Proceed with the instructions to install the software.
- It might be necessary to install the most recent versions of SQL and .NET which are also on the disc. The SW should prompt you to do so.



TOC Lumin TekLink 1.1 Install CD	
Select the program you wish to install. Lumin TekLink 1.0 .NET 4.0 Framework Adobe Acrobat Reader 11.0 SQL Server Compact Edition 4.0 32-bit SQL Server Compact Edition 4.0 64-bit	TELEDYNE INSTRUMENTS Tekmar A Teledyne Technologies Company
Install View Readme	
View Docs View Disclaimers Browse This CD	Close

When the disc is installed, this window will be displayed



The VOC Lumin TekLink 1.1 Install CD	
Select the program you wish to install.	
Lumin TekLink 1.0 .NET 4.0 Framework Adobe Acrobat Reader 11.0 SQL Server Compact Edition 4.0 32-bit SQL Server Compact Edition 4.0 64-bit	TELEDYNE INSTRUMENTS Takmar A Teledyne Technologies Company
Install View Readme	
View Docs View Disclaimers Browse This CD	Close

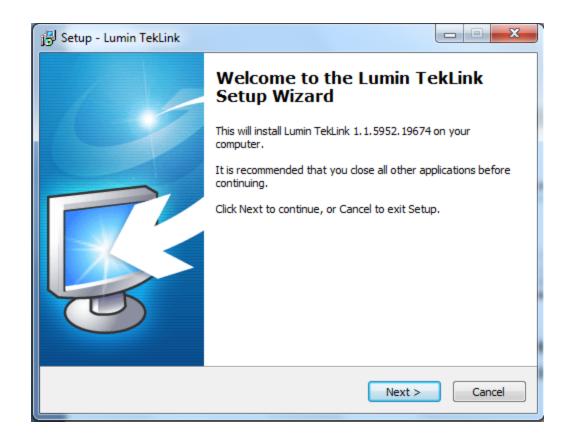
Click on Lumin Teklink.

If your PC needs .NET or SQL, the software will prompt you to do so and the software is on the disc.



Once the peripheral software is installed, the following screen will be displayed.

Click next.





Accept the agreement and click next.

Setup - Lumin TekLink	×
License Agreement Please read the following important information before continuing.	
Please read the following License Agreement. You must accept the terms of this agreement before continuing with the installation.	
TELEDYNE TERMAR SOFTWARE LICENSE AGREEMENT IMPORTANT - READ CAREFULLY. THIS IS A LEGAL AGREEMENT BETWEEN YOU AND TELEDYNE TERMAR, A BUSINESS UNIT OF TELEDYNE INSTRUMENTS, INC. (TELEDYNE TERMAR) FOR THE SOFTWARE PRODUCT YOU ARE INSTALLING, WHICH INCLUDES COMPUTER SOFTWARE AND RELATED DOCUMENTATION. BY INSTALLING OR	
OTHERWISE USING THE SOFTWARE, YOU (BUYER) ACCEPT I accept the agreement I do not accept the agreement	Ŧ
< Back Next >	Cancel



Select the program destination if different from the default and click next.

Setup - Lumin TekLink	
Select Destination Location Where should Lumin TekLink be installed?	
Setup will install Lumin TekLink into the following folder.	
To continue, click Next. If you would like to select a different folder, clic	k Browse.
C:\Program Files\Teledyne Tekmar\Lumin TekLink	Browse
At least 121.4 MB of free disk space is required.	
< Back Next >	Cancel



Select full installation unless you are installing on another PC on the network that you want to control the unit with. Then click next.

🔁 Setup - Lumin TekLink
Select Components Which components should be installed?
Select the components you want to install; clear the components you do not want to install. Click Next when you are ready to continue.
Full installation (host an instrument on this PC)
Full installation (host an instrument on this PC)
Client files only (access an instrument hosted on a different PC)
< Back Next > Cancel



Select shortcut destination and click next.

🔂 Setup - Lumin TekLink
Select Start Menu Folder Where should Setup place the program's shortcuts?
Setup will create the program's shortcuts in the following Start Menu folder.
To continue, click Next. If you would like to select a different folder, click Browse.
Teledyne Tekmar \Lumin TekLink Browse
< Back Next > Cancel



Select or deselect additional tasks and click next.

B Setup - Lumin TekLink	
Select Additional Tasks Which additional tasks should be performed?	
Select the additional tasks you would like Setup to perform while installing TekLink, then click Next. Select any additional icons to install Additional Icons: Create a TekLink icon on the desktop) Lumin
< Back Next >	Cancel



Click install

i j :	Setup - Lumin TekLink	
	Ready to Install Setup is now ready to begin installing Lumin TekLink on your computer.	
	Click Install to continue with the installation, or click Back if you want to revier change any settings.	w or
	Destination location: C:\Program Files\Teledyne Tekmar\Lumin TekLink	<u>^</u>
	Setup type: Full installation (host an instrument on this PC)	E
	Selected components: Client Program Files Language and help files Updated Firmware Sound Effects	
	Server Program Files	• •
	< Back Install	Cancel



Once completed, the system will prompt you to launch Teklink or view the read me file. Do not launch Teklink yet.

📳 Setup - Lumin TekLink	
	Completing the Lumin TekLink Setup Wizard
	Setup has finished installing Lumin TekLink on your computer. The application may be launched by selecting the installed icons.
	Click Finish to exit Setup.
	☑ Launch TekLink
	View Readme File
	Finish



The following will be listed on the readme file:

Release Notes for Lumin TekLink

Provided Install Package Updates

Requirements for Running VOC Lumin TekLink

Software Changes

Firmware Changes

Troubleshooting

Technical Support



- Before starting the software, install the Lumin USB drivers.
- Connect the Lumin with the USB cable to the PC and turn on.



- Before starting the software, install the Lumin USB drivers.
- This should happen automatically when the Lumin is connected and powered up after the SW is installed.
- Connect the Lumin with the USB cable to the PC and turn on.

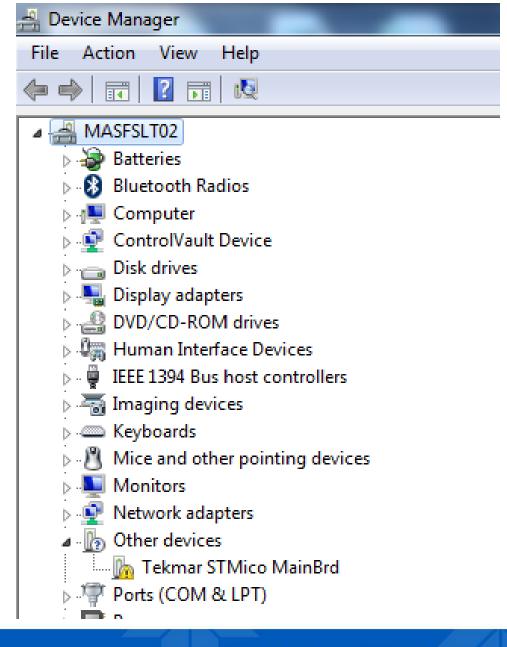


- Go to Control Panel, System, Device Manager
- Find WinUSB Devices under Universal Serial Bus Devices
- If the Tekmar device is labeled correctly as it is in the screen shot to the right, you can start the SW.





 If the drivers are not installed correctly, the Tekmar device will not be correctly labeled as seen in the screen shot.





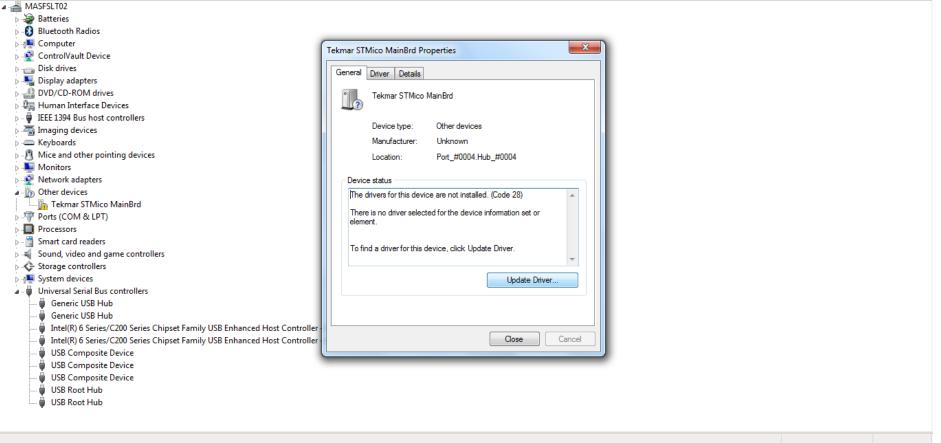
- Right click and choose properties.
- Choose update drivers



🚔 Device Manager

File Action View Help

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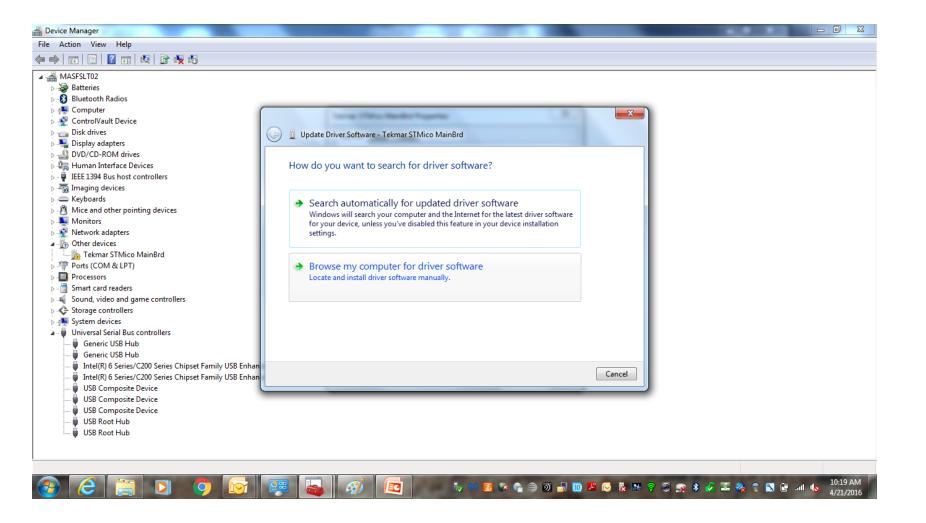






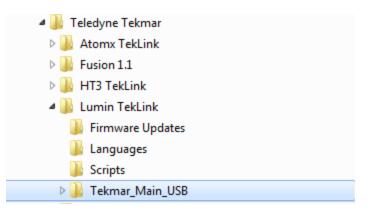
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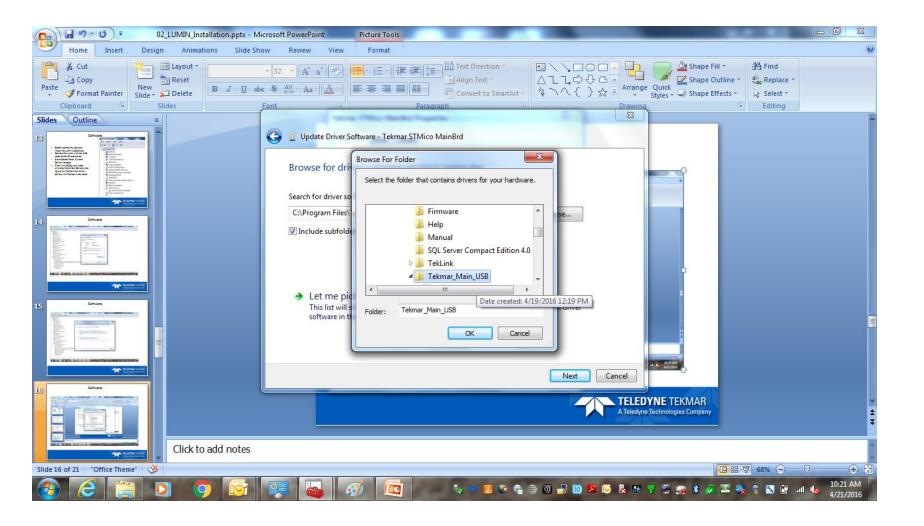




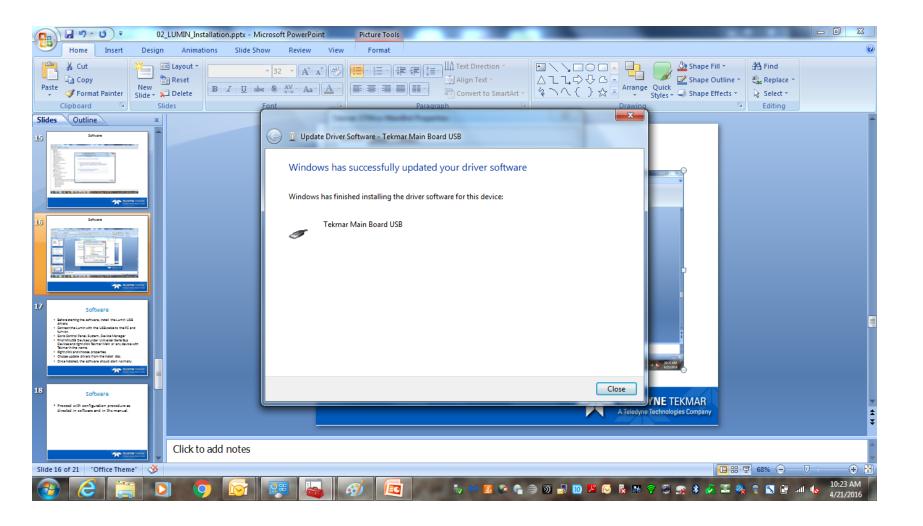
- Choose Browse Computer
 for drivers
- Choose the correct driver folder as seen in the diagram
- Once installed, you can then start the software normally.













 The Lumin will be displayed as "Tekmar Main Board USB" if installed successfully.



Device Manager	
File Action View Help	
A 📲 MASFSLT02	
→ → Batteries	
- Studeoth Radios	
- A Computer	
- Strandowski - St Strandowski - Strandowski	
Disk drives	
Display adapters	
DVD/CD-ROM drives	
- 🕼 Human Interface Devices	
→ - ₩ IEEE 1394 Bus host controllers	
> − ∰ Imaging devices	
A Keyboards	
- M Mice and other pointing devices	
- 🖉 Network adapters	
Ports (COM & LPT)	
- D Processors	
- 🗍 Smart card readers	
Sound, video and game controllers	
> 💠 Storage controllers	
- ₁∎ System devices	
a 📲 Universal Serial Bus controllers	
🟺 Generic USB Hub	
🖟 Generic USB Hub	
🖟 Intel(R) 6 Series/C200 Series Chipset Family USB Enhanced Host Controller - 1C26	
— Intel(R) 6 Series/C200 Series Chipset Family USB Enhanced Host Controller - 1C2D	
USB Composite Device	
USB Composite Device	
USB Composite Device	
USB Root Hub	
USB Root Hub	
WinUSB devices	
🗸 🖗 Tekmar Main Board USB	
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• Start Lumin Teklink once USB drivers are correctly installed.





Click on OK when instructed that no units are configured.



Configure the Lumin either as a standalone or with an Aquatek 100.

Choose the previously installed USB drivers. (not shown in screen shot as no unit is connected.)

T Configuration	
General Option	ns Leak Check
Name:	Lumin
Description:	P&T Concentrator
Model:	Lumin
Connection USB Conr	Lumin Lumin/AQUATek 100
USB Conr	
Deactivate t	his instrument profile
Print	OK Cancel Help



Configure options

T Configuration
General Options Leak Check
 Enable Beeper Enable Sample ID column in schedules
 Enable Guardian foam sensor Sensor Only (Abort Sample On Purge Gas Helium
Chromatograph (GC) Type Selected by GC Model: Agilent 7890 (31) Standard Type: 63 User Type: 31
Print OK Cancel Help



Configure leak check options or leave as default.

T Configuration	x
General Options Leak Check	
Enable Beeper Frankle Sample ID columns in school dules	
Enable Sample ID column in schedules	
Enable Guardian foam sensor	
Sensor Only (Abort Sample On 💌	
Purge Gas Helium 👻	
Chromatograph (GC) Type	
Selected by GC Model: Agilent 7890 (31)	
Standard Type: 63	
© User Type: 31	
Print OK Cancel Help	



Once configured, highlight the instrument and click on connect.

	Default	Name	Description	Model
]	0	Lumin1	1st Floor VOC Lab	Lumin/AQUATek 100
		trument profiles		



• If the default unit is not saved, re-start the software by right clicking and select "run as administrator".



- The Lumin software will control the standalone Lumin and the Lumin/A100.
- If connecting to the Solatek, you must each the Lumin and Solatek for their own software.
- If connecting to the Archon or Centurion, you must run them from their programs and set the Lumin up separately.
- Theoretically these options should work the same as with a Stratum but are not currently supported.



Firmware

- Make sure the latest firmware is installed on the system.
- Firmware files can be found on the installation disc, in the Teklink directory, or on Tekmar's website.



Final Check-out

- Run Leak Check
- Run Benchmark
- Bake the system.
- Perform hardware, software, and manual familiarization with the customer.
- Run test Blanks and STD's.

