



TELEDYNE TEKMAR

A Teledyne Technologies Company

World-Class Analytical Solutions and Service

Lumin Installation



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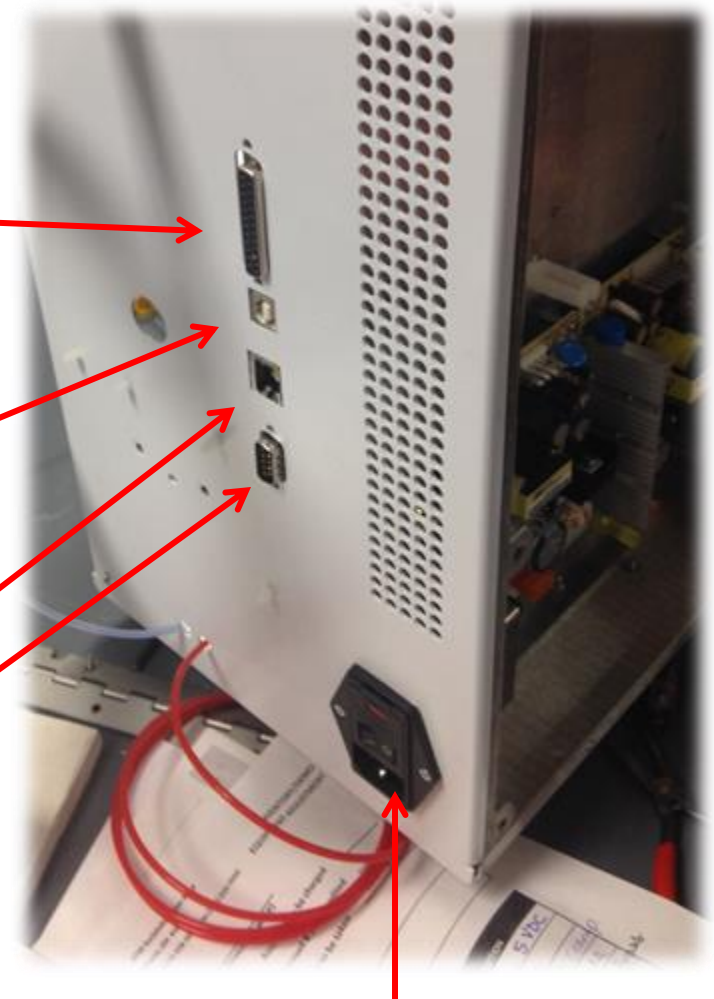
Unpacking the Unit

- 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.



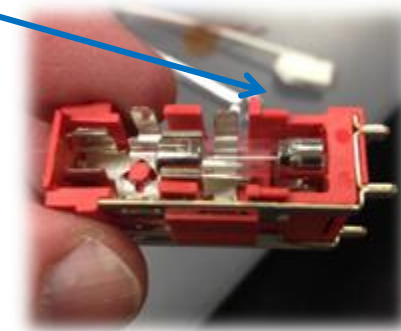
Power Cable



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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.



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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.



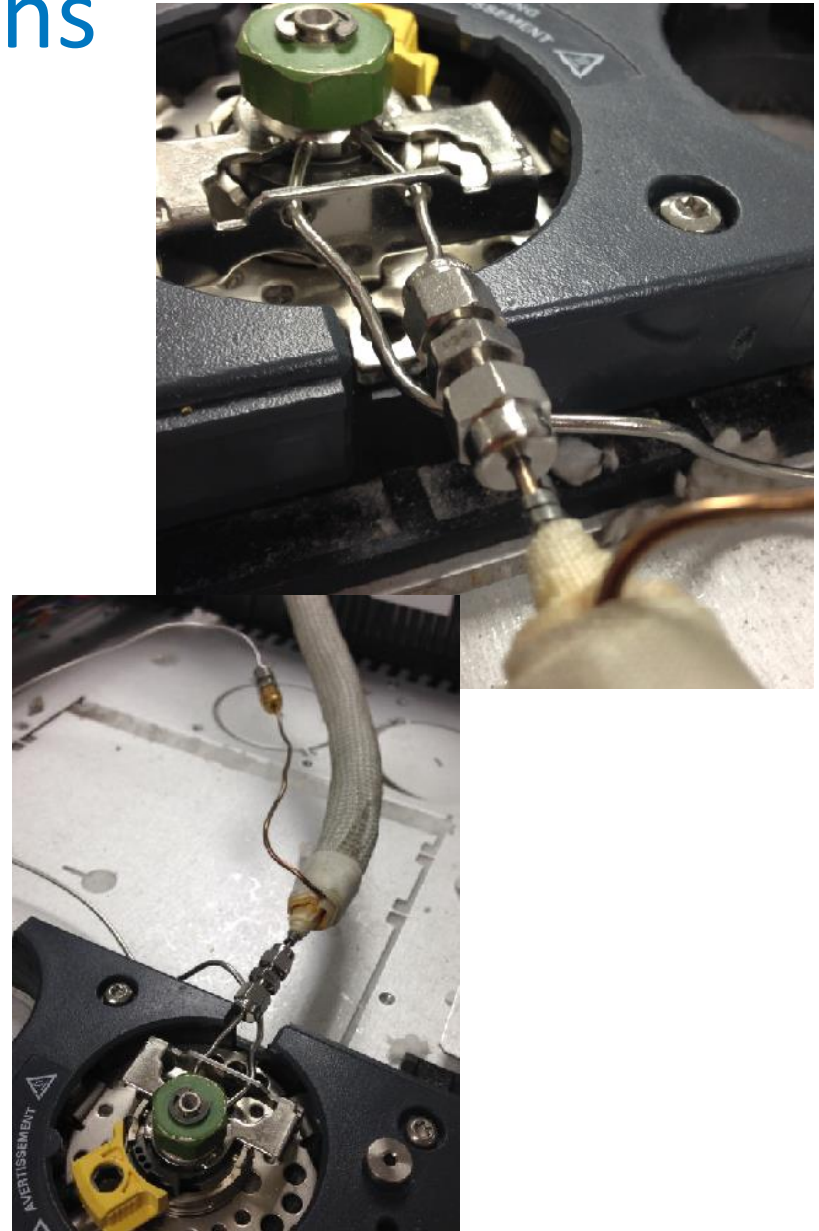
Agilent Injection Port Pneumatic Connections

- 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 non-heated line to the carrier gas line coming from the EPC



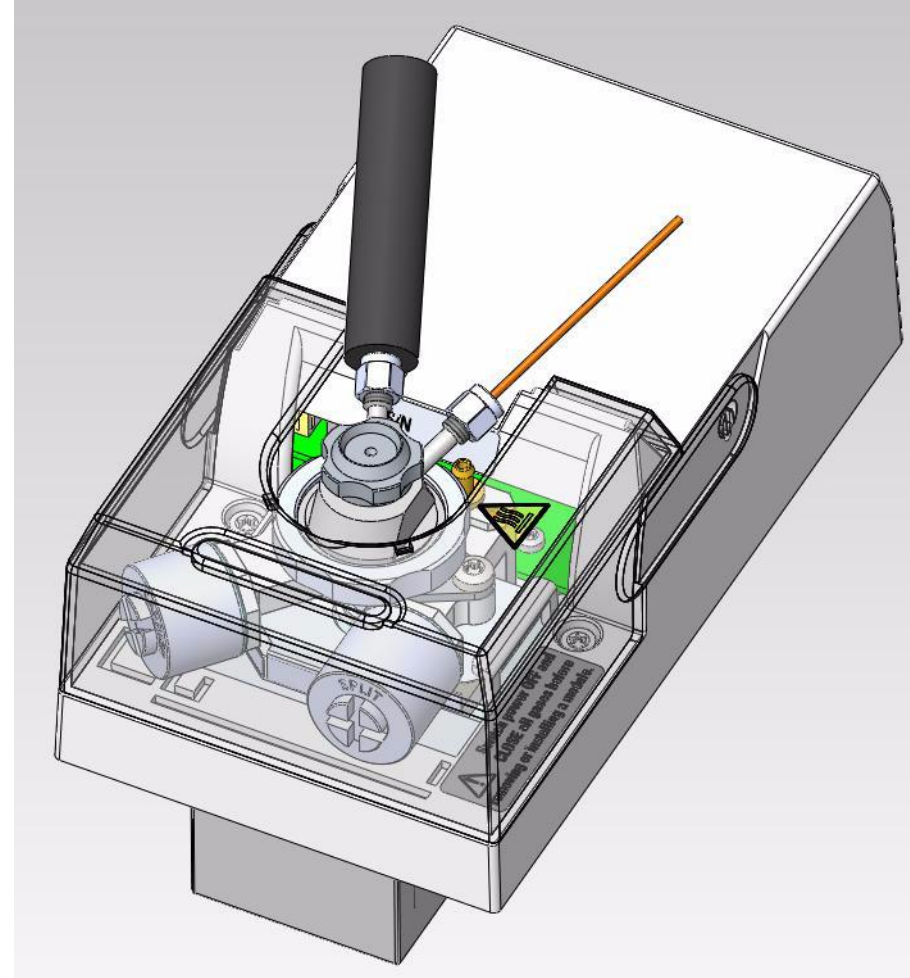
Agilent Injection Port Pneumatic Connections

- 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



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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.



Software



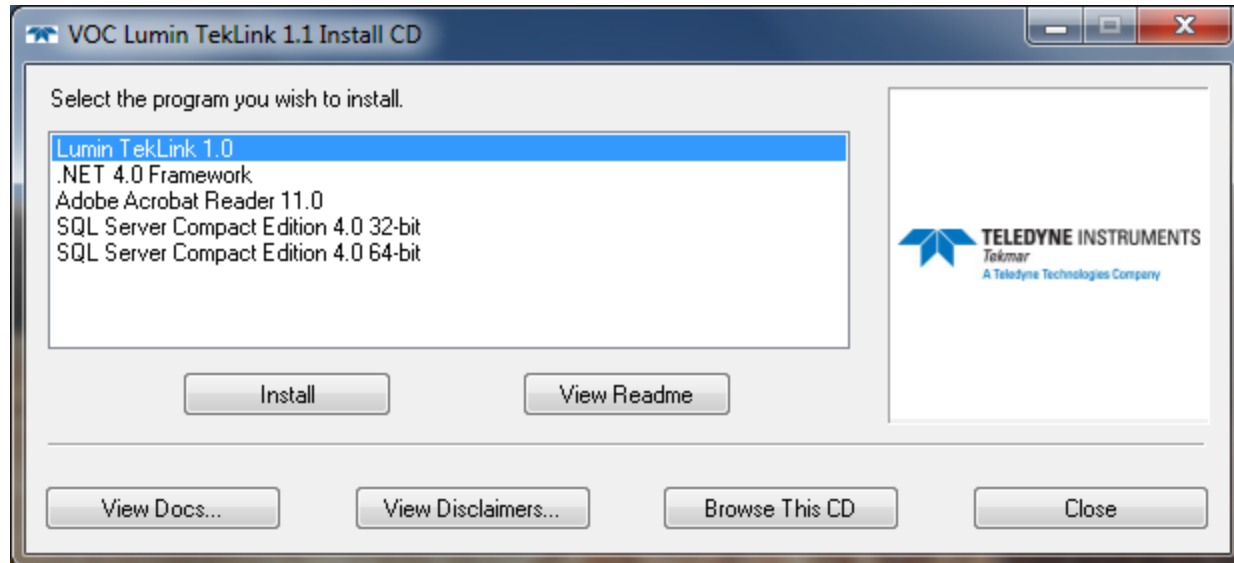
- A Lumin TekLink software CD is included with the Lumin.
- The software revision number is listed on the outside of the disk.
- The Lumin User Manual is included on this CD as well as any peripheral software that may be needed.

Software

- 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.

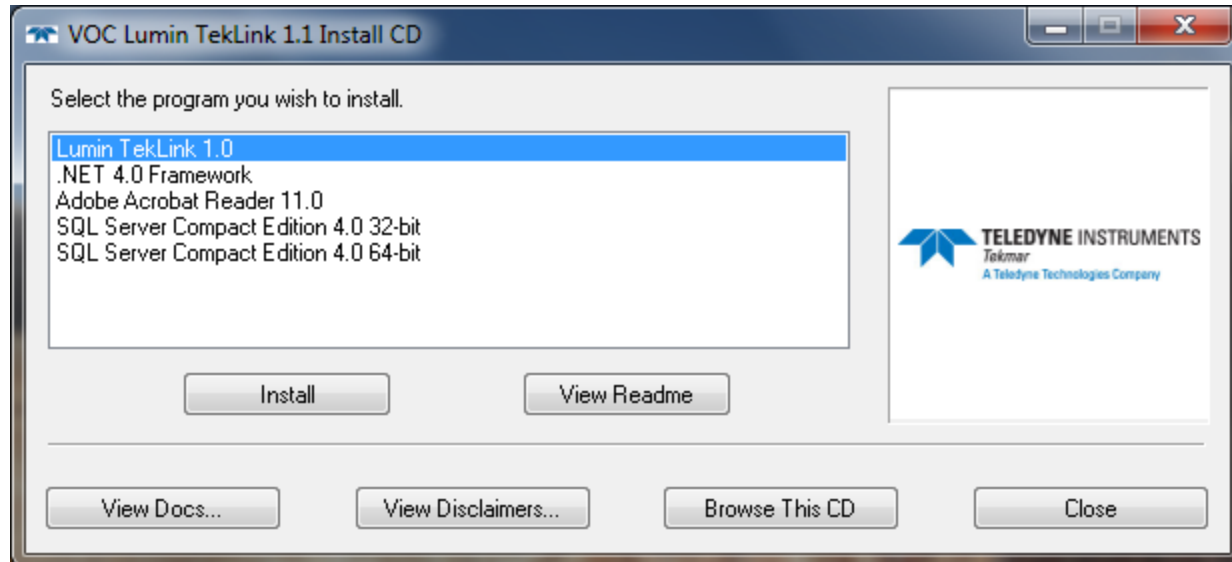


Software



When the disc is installed, this window will be displayed

Software



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.



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Software

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

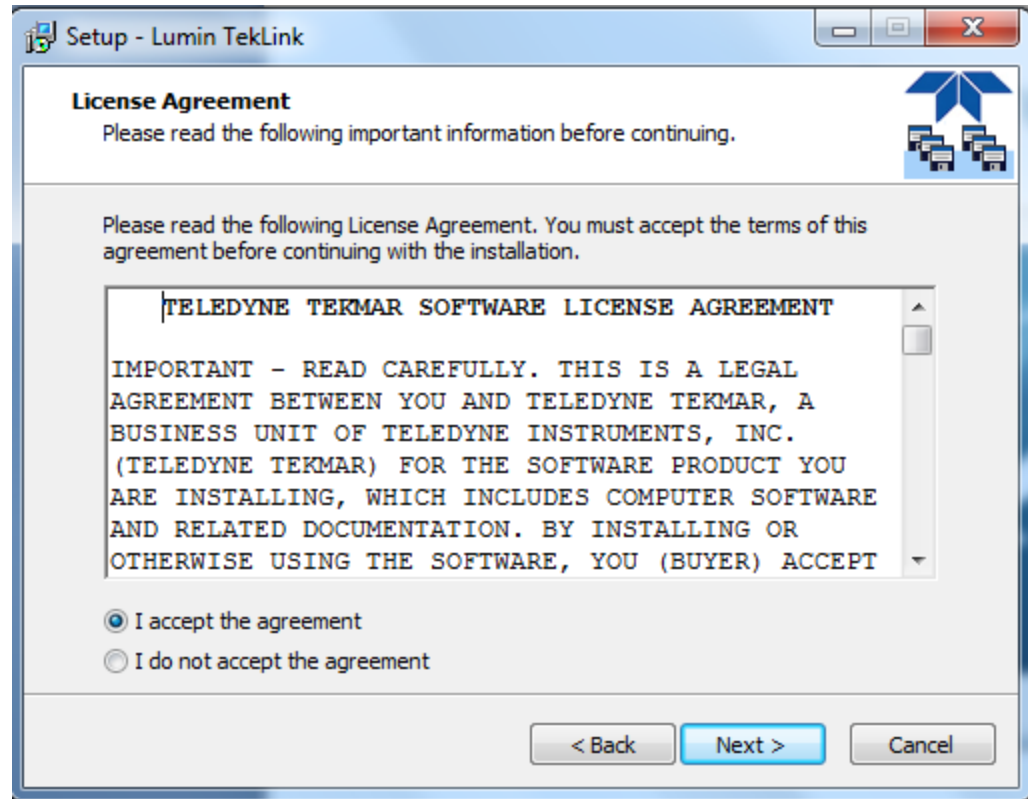
Click next.



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Software

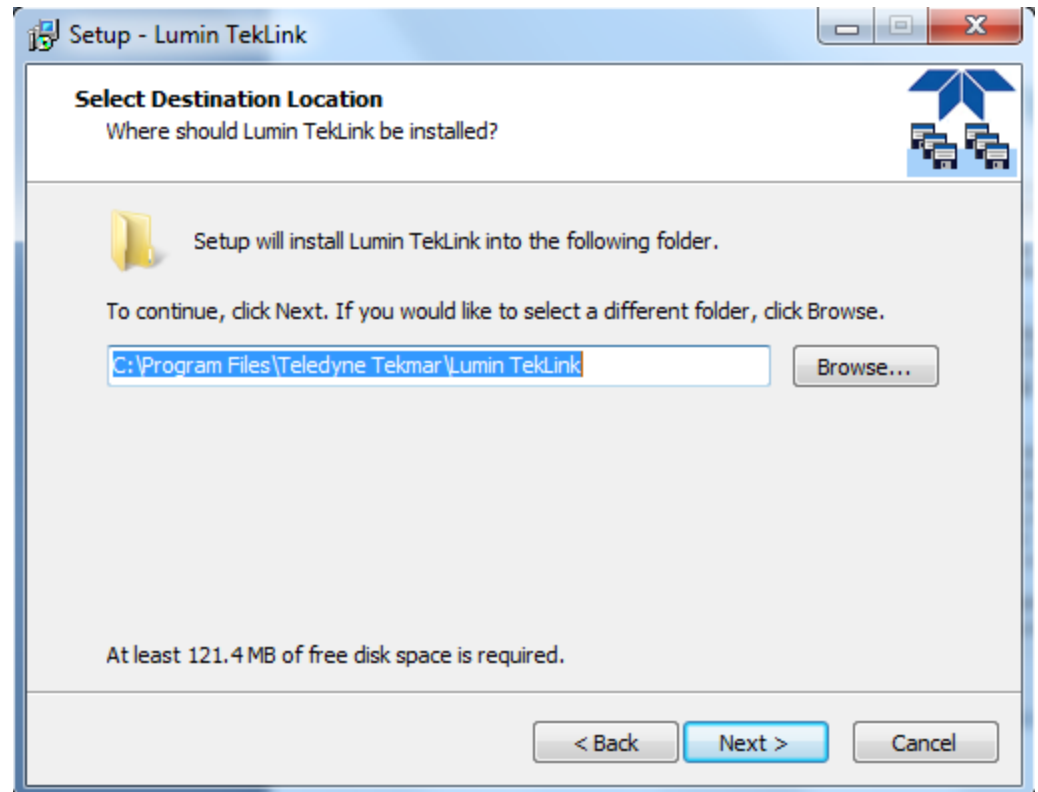
Accept the agreement and click next.



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Software

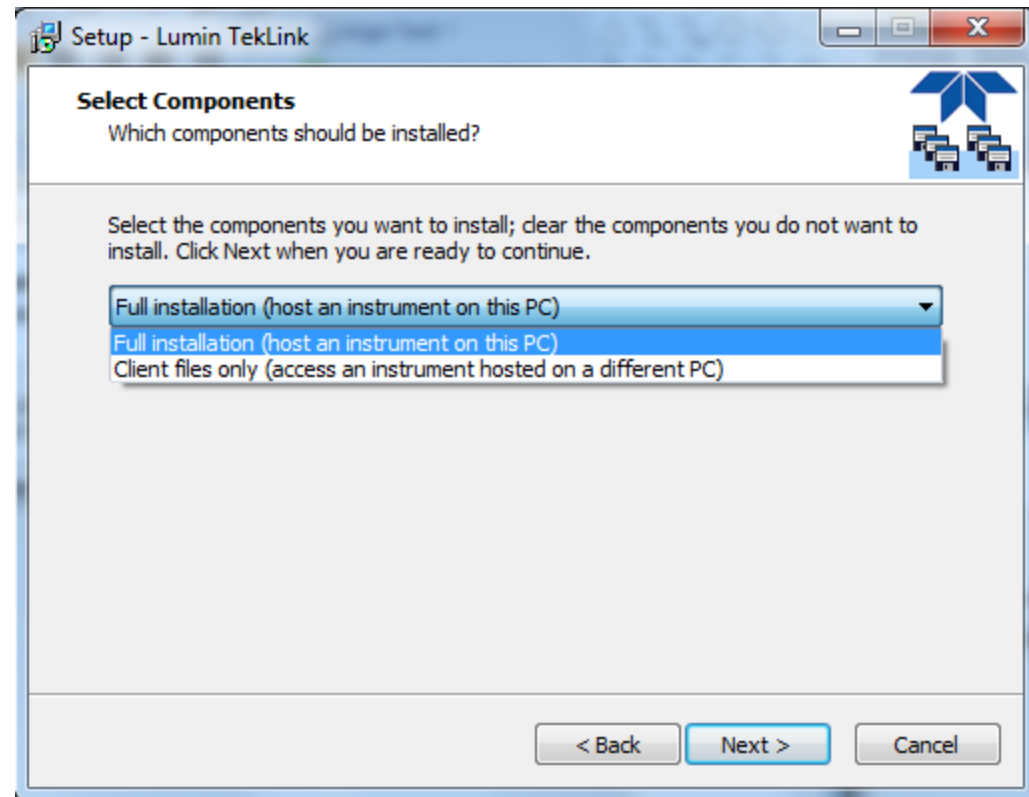
Select the program destination if different from the default and click next.



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Software

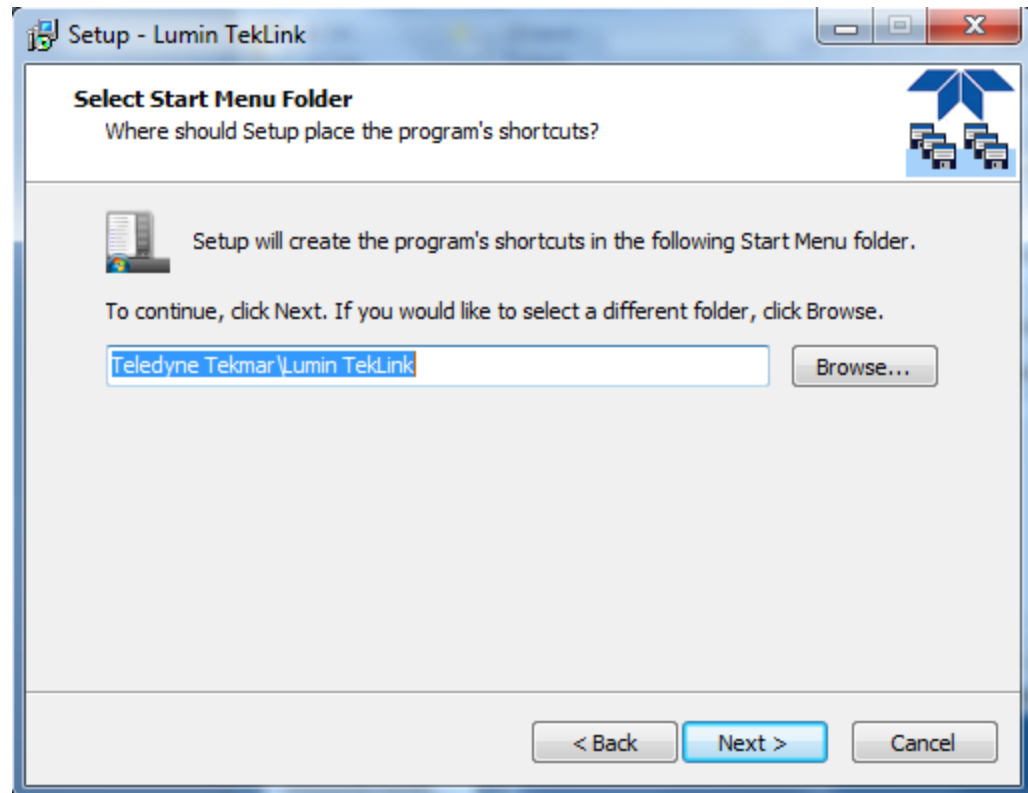
Select full installation unless you are installing on another PC on the network that you want to control the unit with. Then click next.



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Software

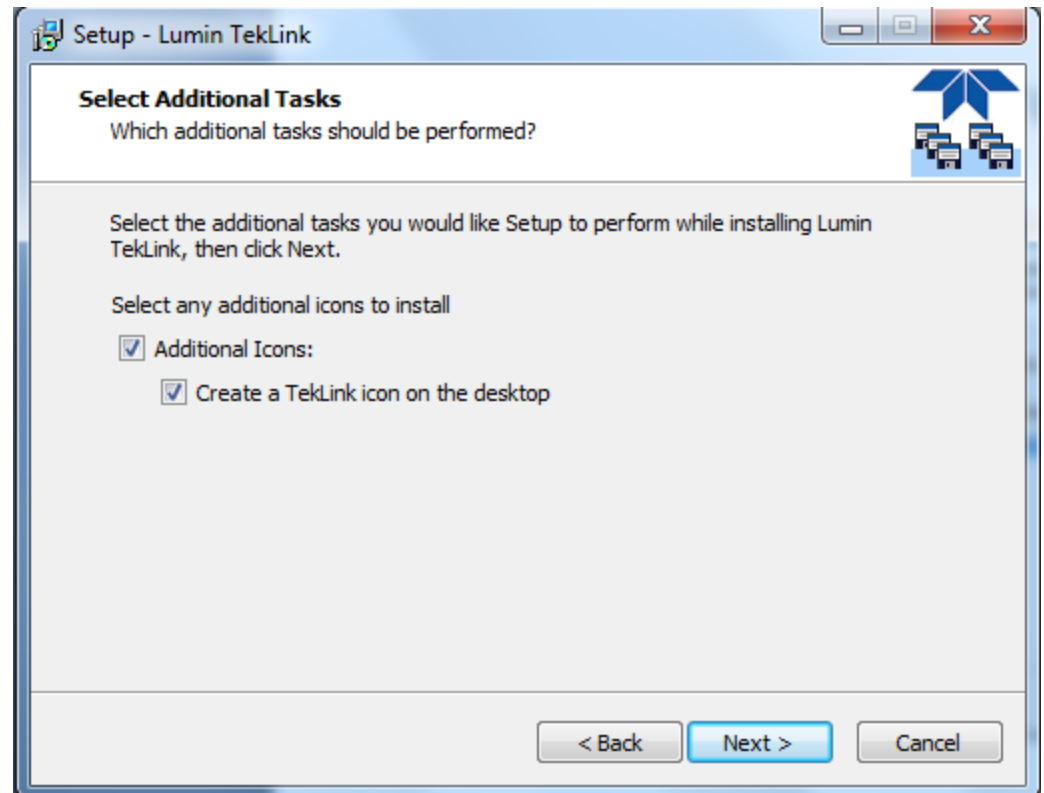
Select shortcut destination and click next.



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Software

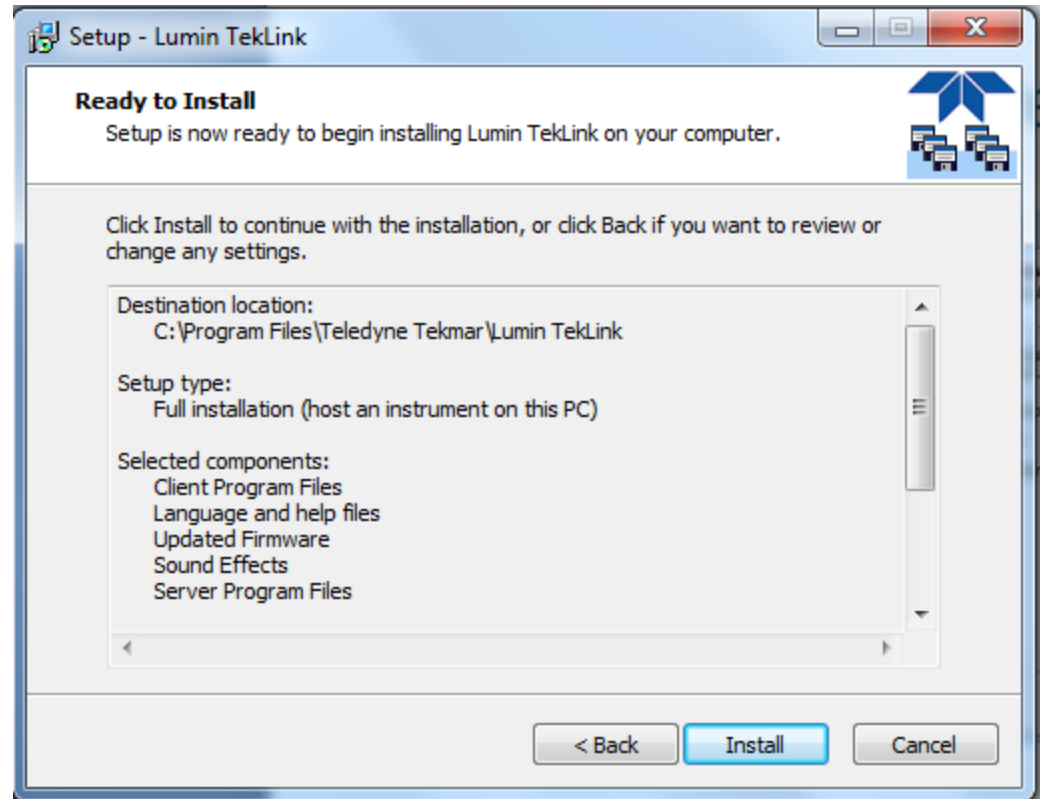
Select or deselect additional tasks and click next.



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Software

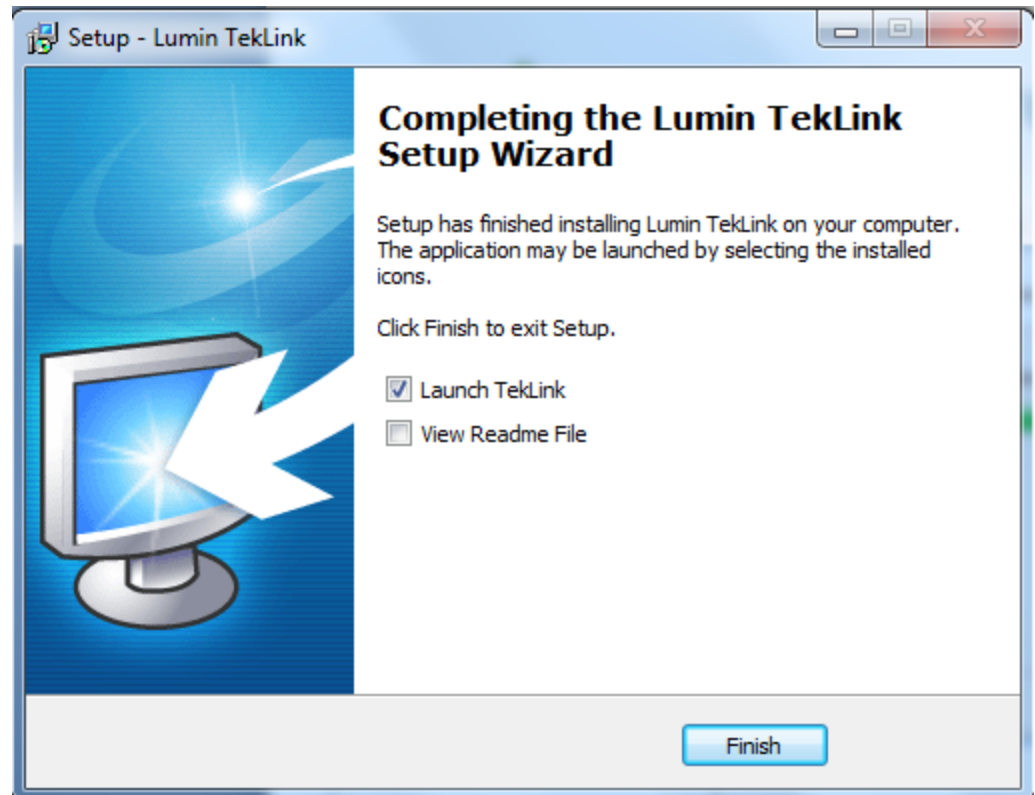
Click install



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Software

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



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Software

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



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Software

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



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Software

- 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.



Software

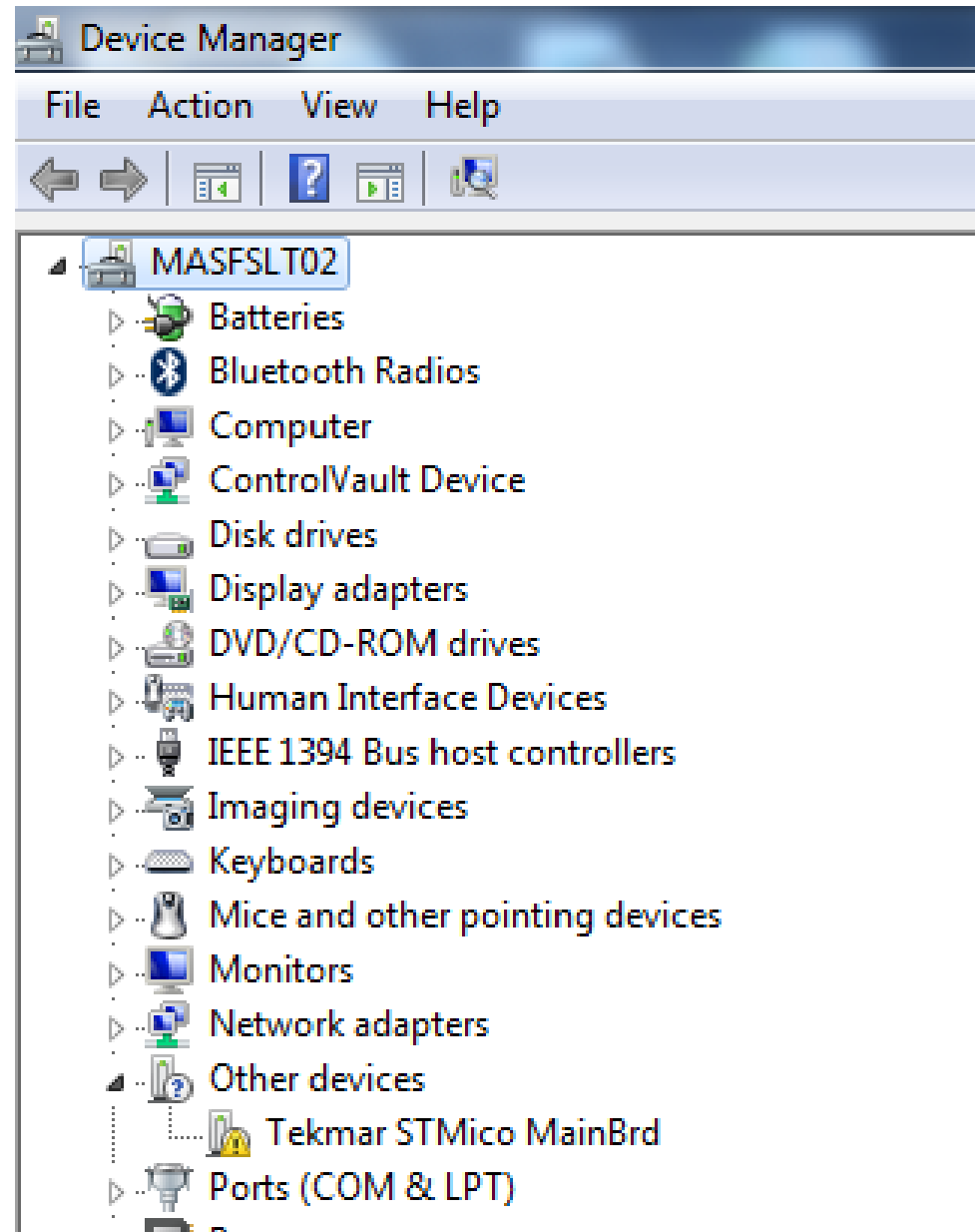
- Go to Control Panel, System, Device Manager
- Find WinUSB Devices under Universal Serial Bus controllers
- If the Tekmar device is labeled correctly as it is in the screen shot to the right, you can start the SW.



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Software

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



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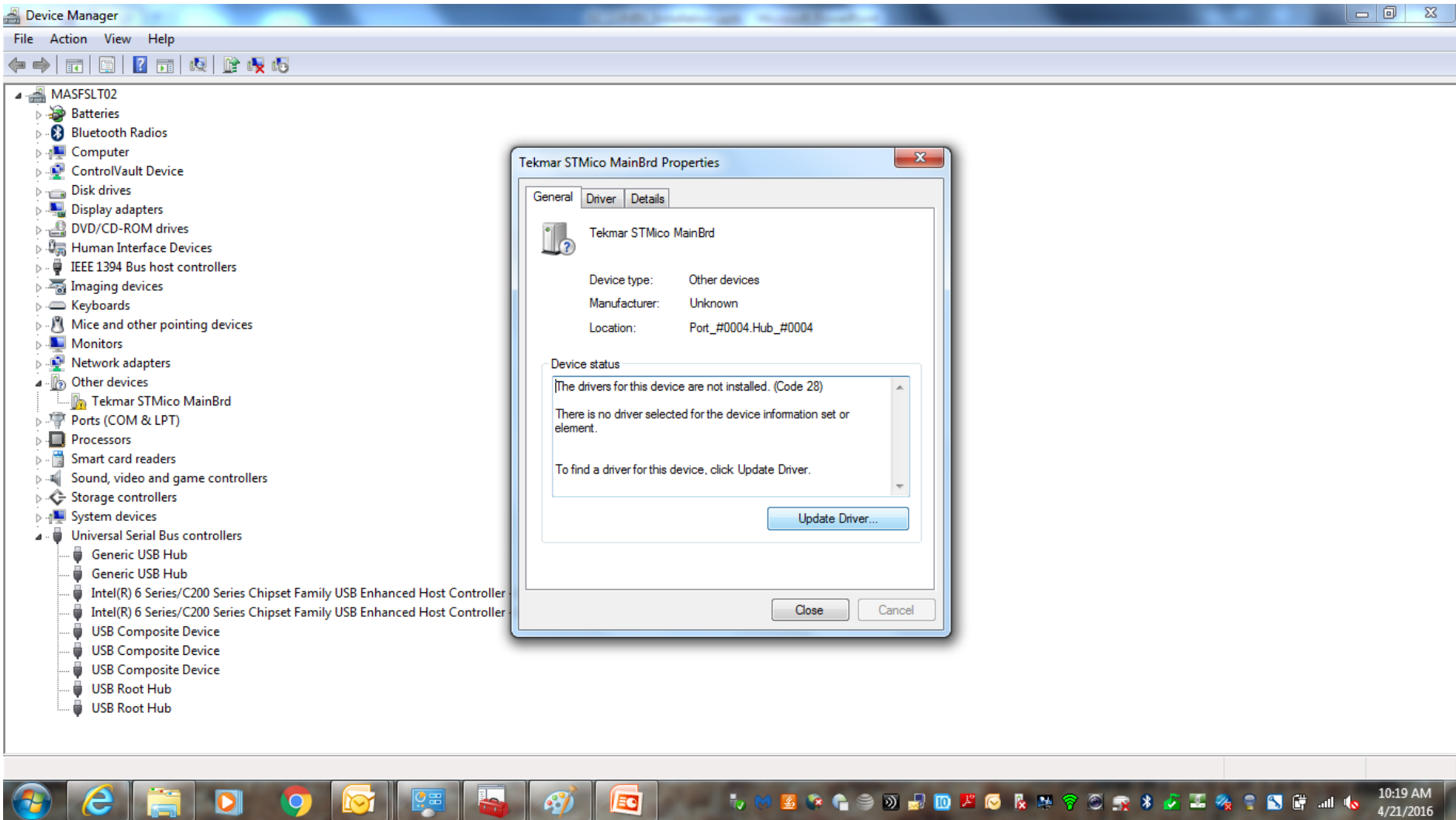
Software

- Right click and choose properties.
- Choose update drivers



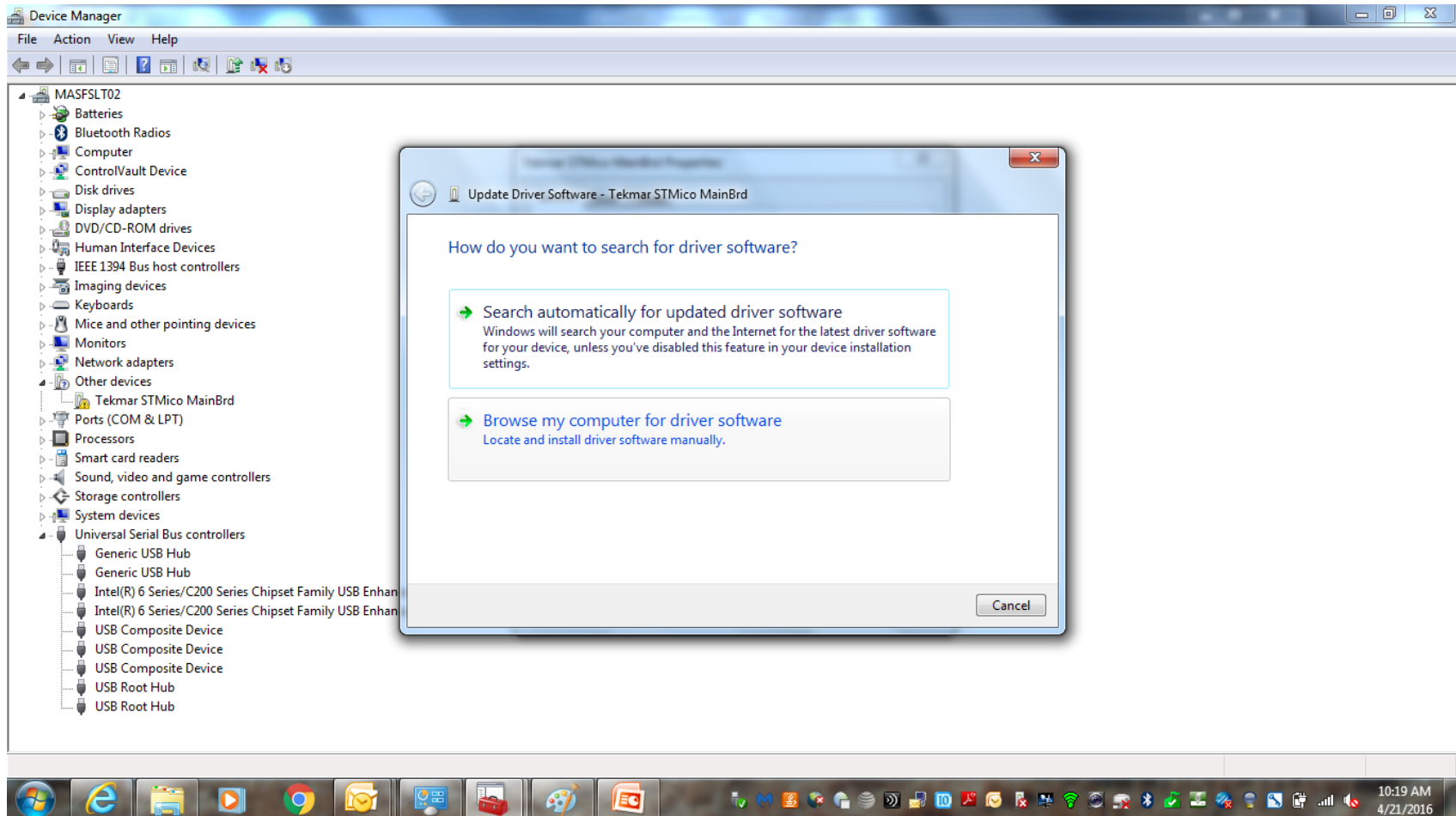
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Software



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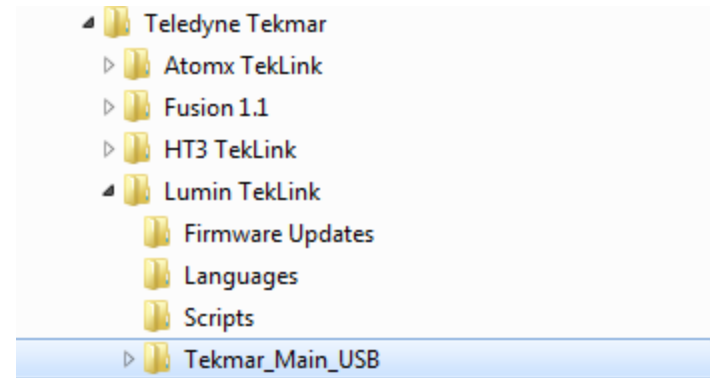
Software



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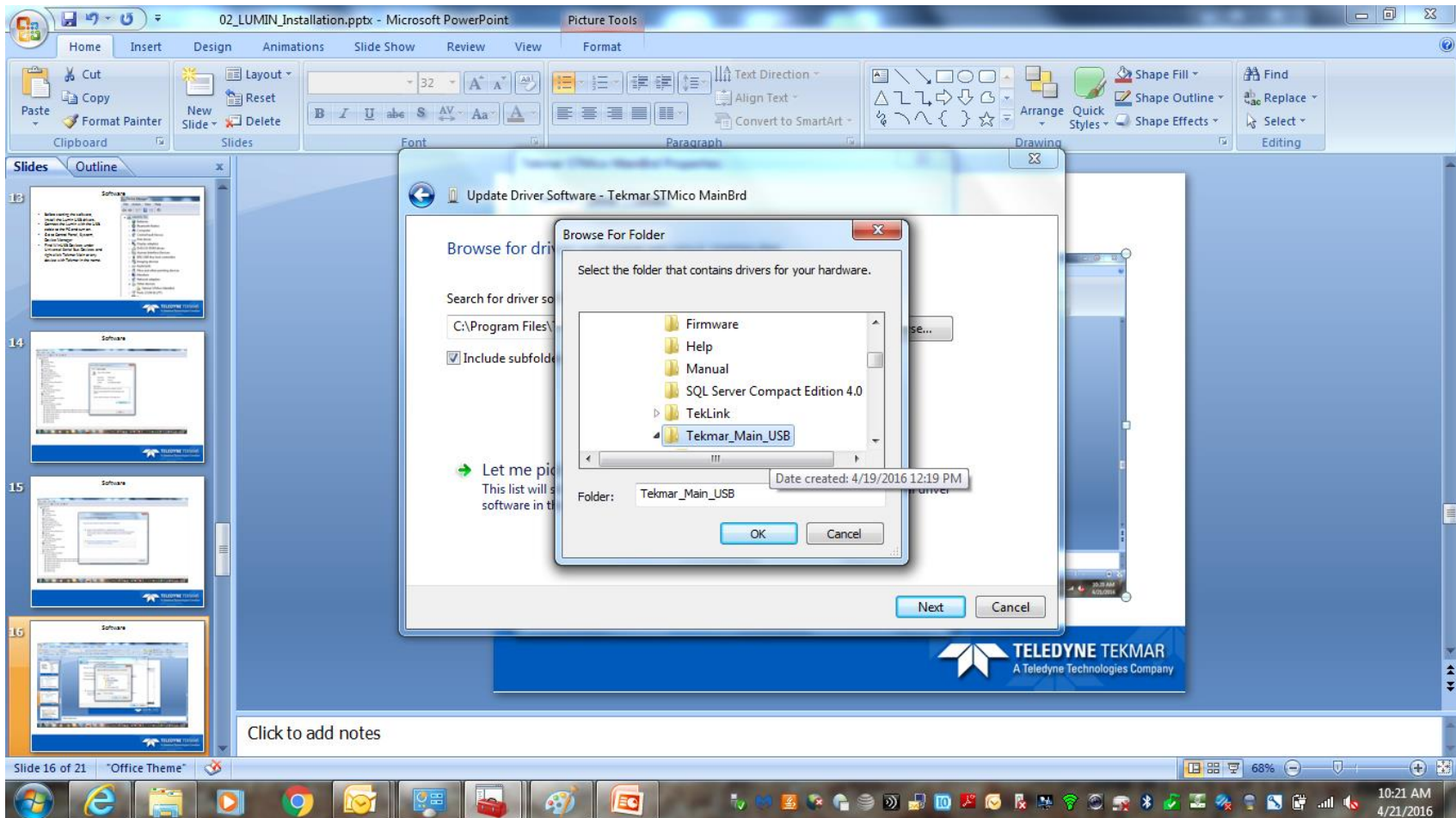
Software

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



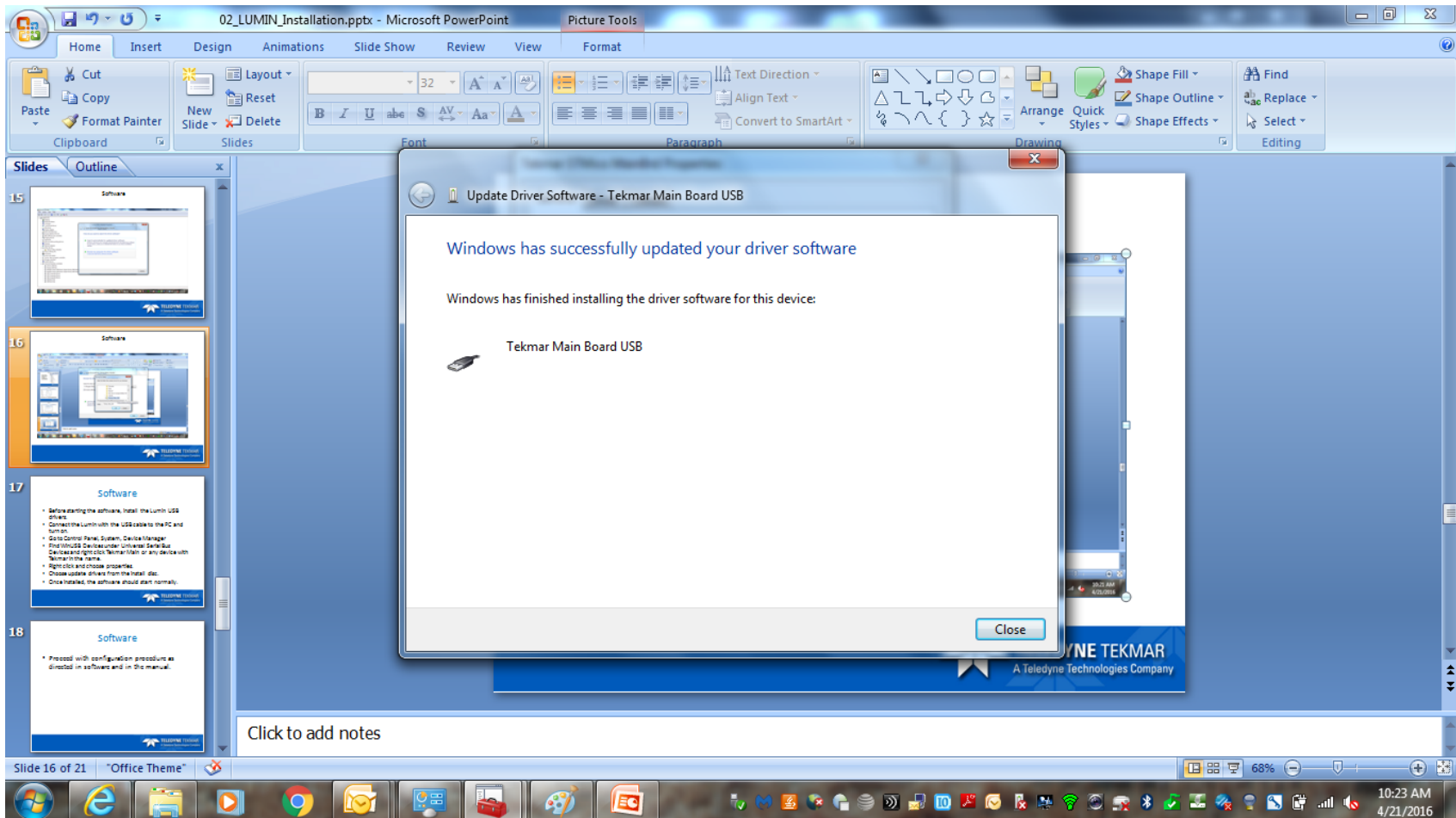
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Software



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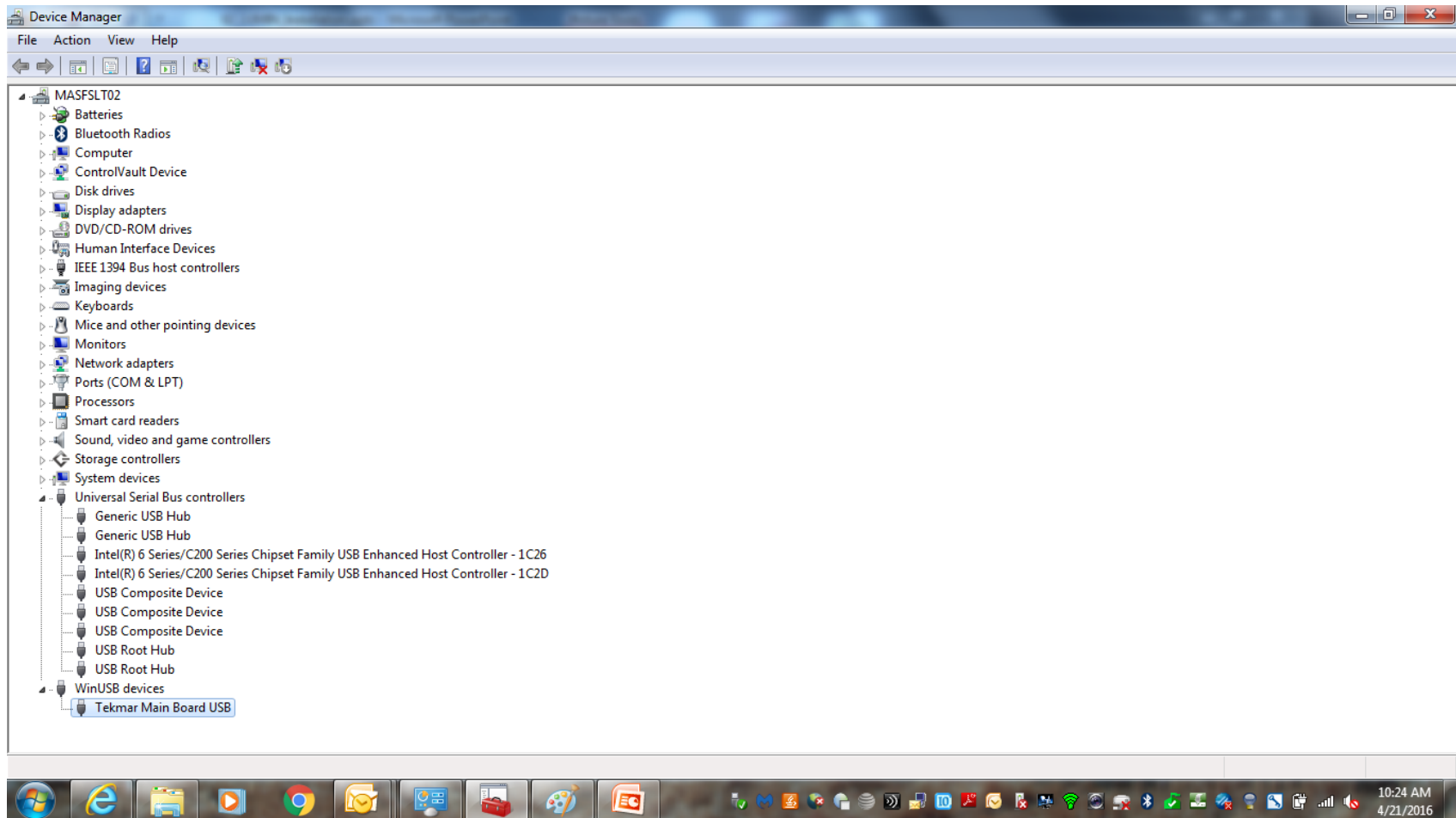
Software

- The Lumin will be displayed as “Tekmar Main Board USB” if installed successfully.



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Software



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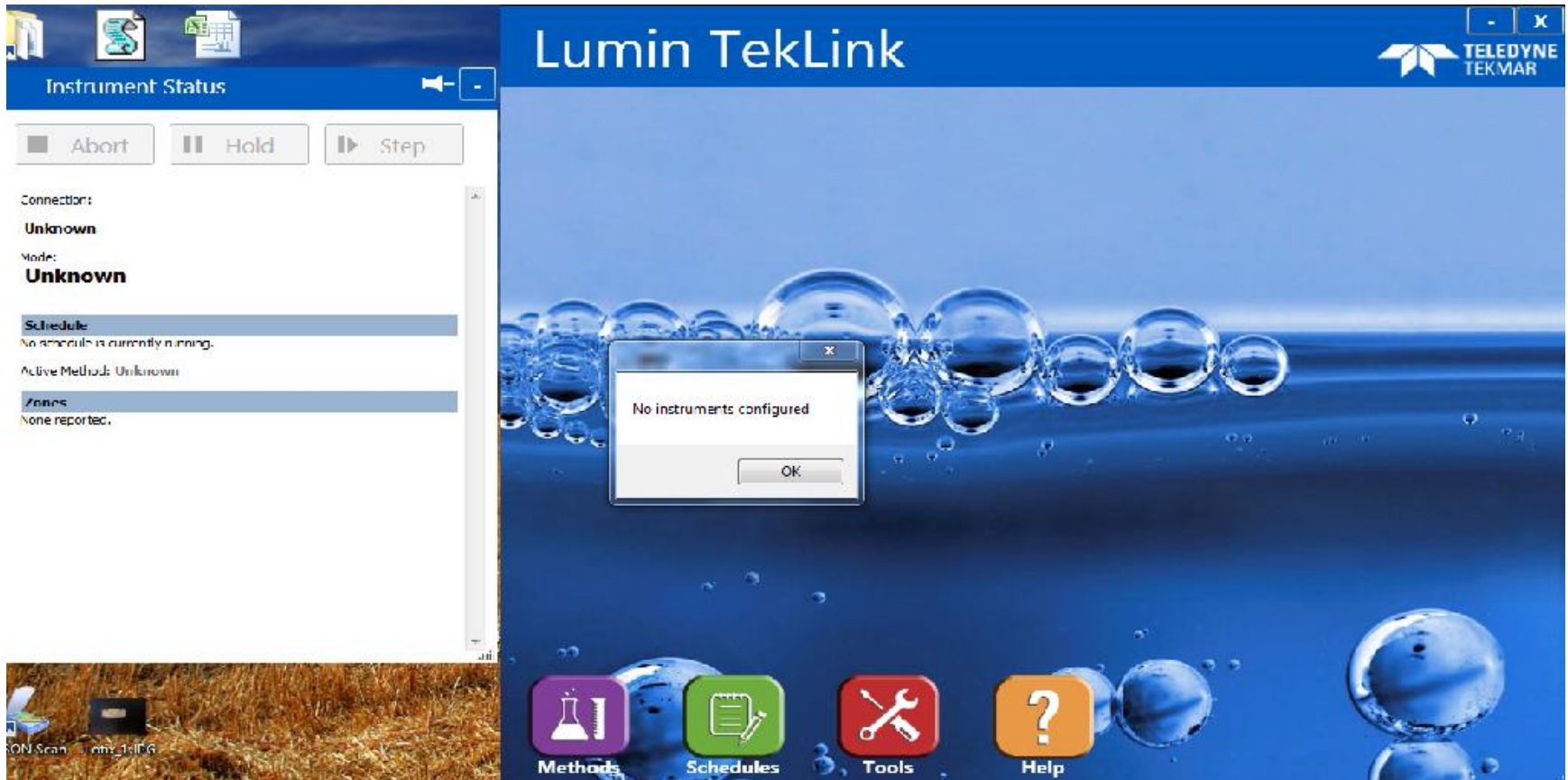
Software

- Start Lumin Teklink once USB drivers are correctly installed.



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Software



Click on OK when instructed that no units are configured.

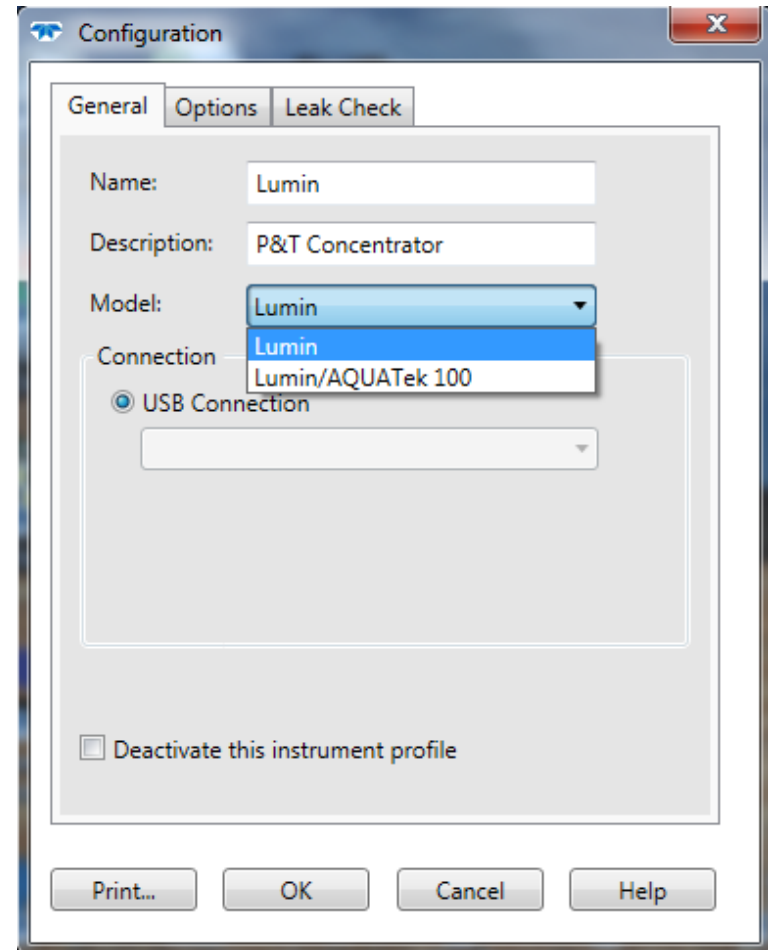


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Software

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

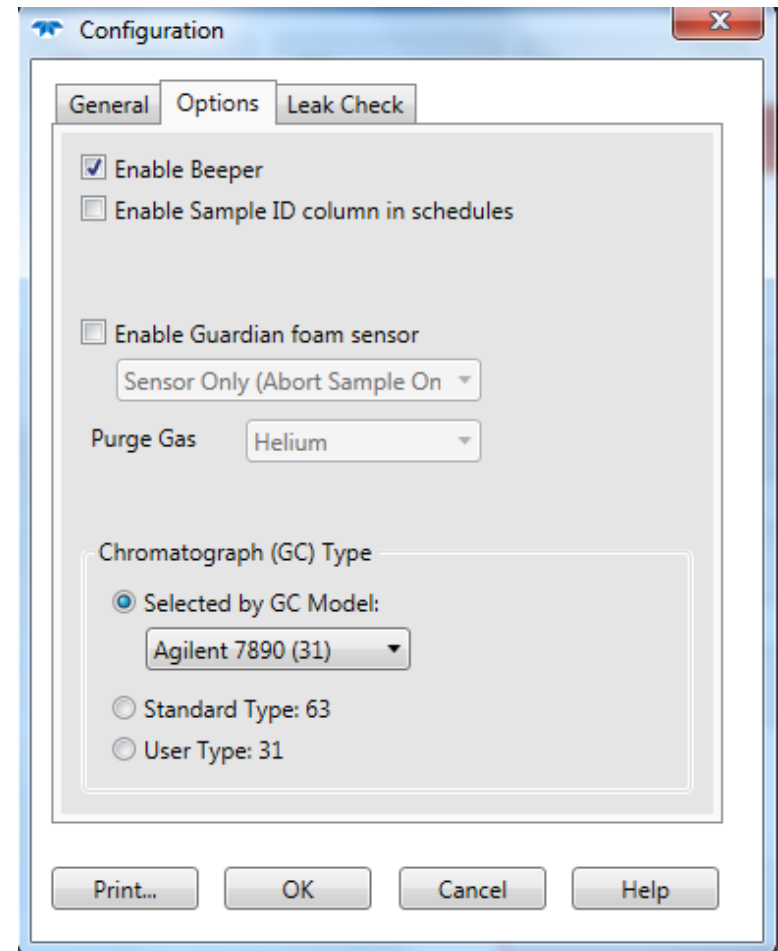
Choose the previously installed USB drivers. (not shown in screen shot as no unit is connected.)



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Software

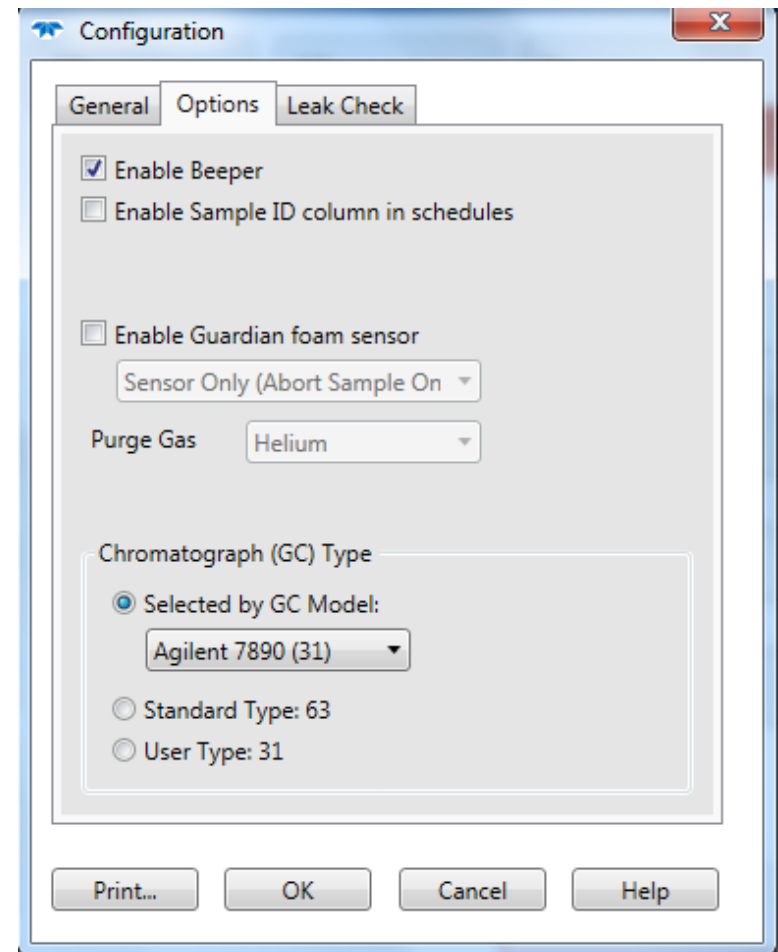
Configure options



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Software

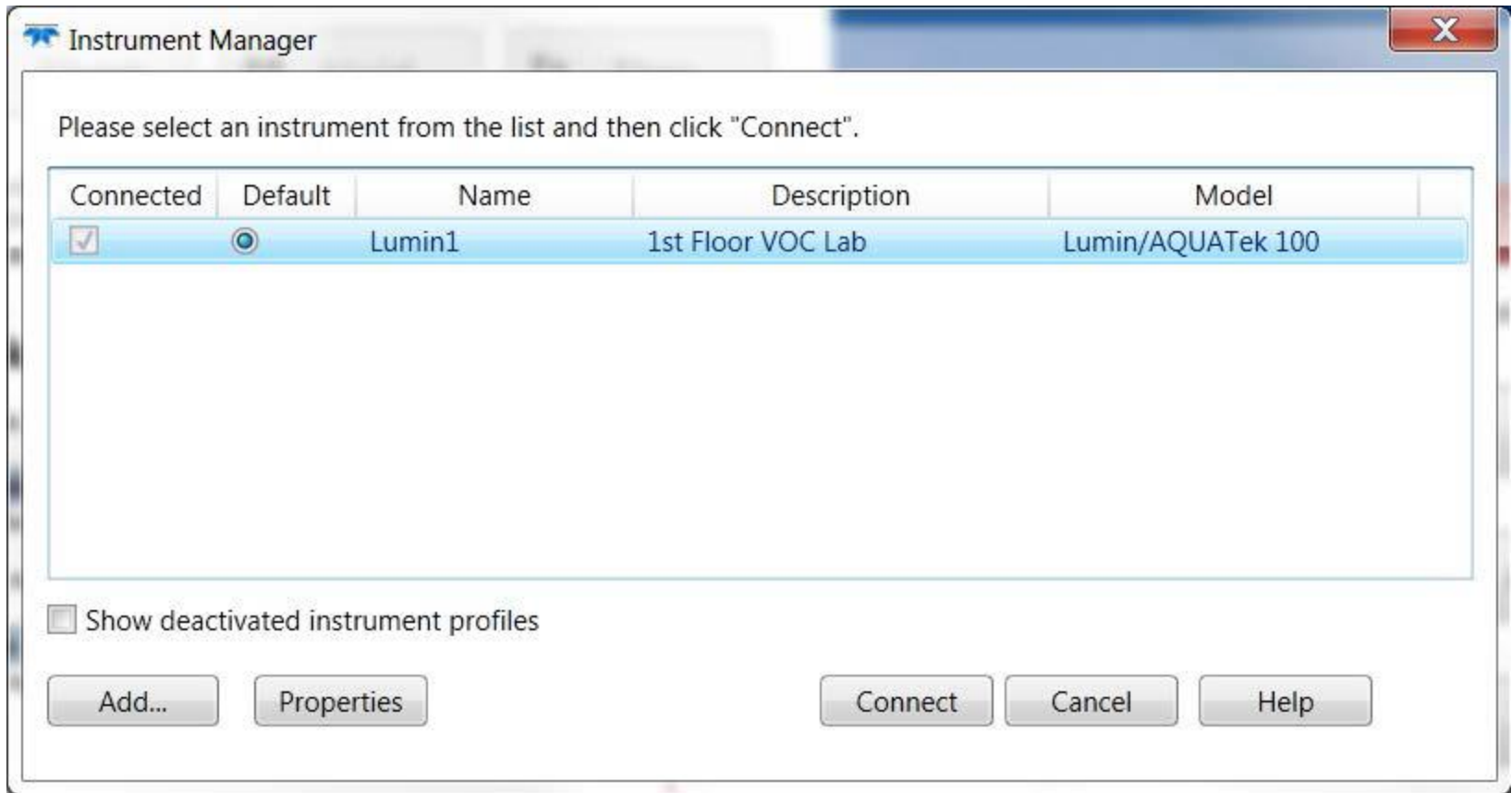
Configure leak check options or leave as default.



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Once configured, highlight the instrument and click on connect.



Software

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



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Software

- 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.



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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.



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