Model 302 Six Channel USB Chromatography Data System Quick Start Tutorial

The Model 302 comes with a two meter USB cable, power cord, (may be either 120 or 220 volt) and a PeakSimple software disk. PeakSimple software may also be downloaded from **www.srigc.com**. Its a good idea to check the website in case a more recent software version has been released.

If the 302 A/D board is installed in a SRI GC rather than in a stand-alone box as shown then plug the USB cable into the right side of the GC. Also, if the 302 is installed in an SRI GC then all of the hardware connections will have been made already, you just have to install the software.

Plug the power cord from the 302 box into the mains wall socket and turn on the power switch located on the back of the stand-alone box. Plug the USB cable into the 302 box.

Wait until PeakSimple software is already installed before plugging the USB cable into your computer.

Install PeakSimple software from the CD disk or from the file downloaded from SRI's website. Browse to the CD or to the downloaded file on your hard-drive (C:\ ) . The file's name will be setup354 if it is version 3.54 of PeakSimple and setup356 if the PeakSimple version number is 3.56. PeakSimple is updated every few months usually to add a new feature.

Install PeakSimple in the suggested folder (C:\peak354) unless you have a very good reason to choose another.
Using the typical folder name helps simplify the tech support process.

SRI Tech Support 310-214-5092
www.srigc.com
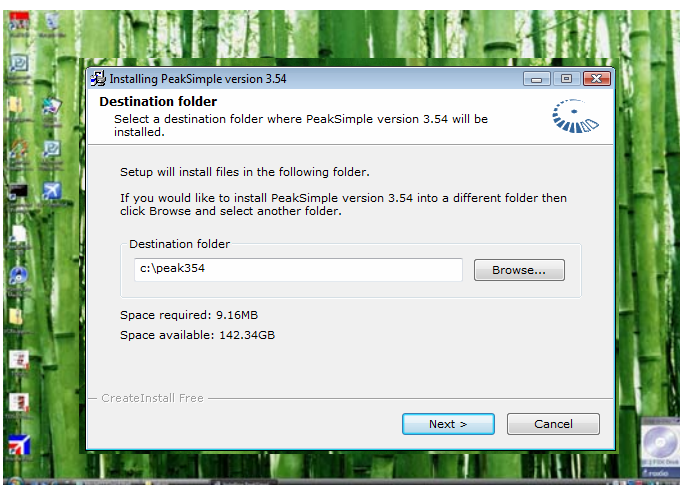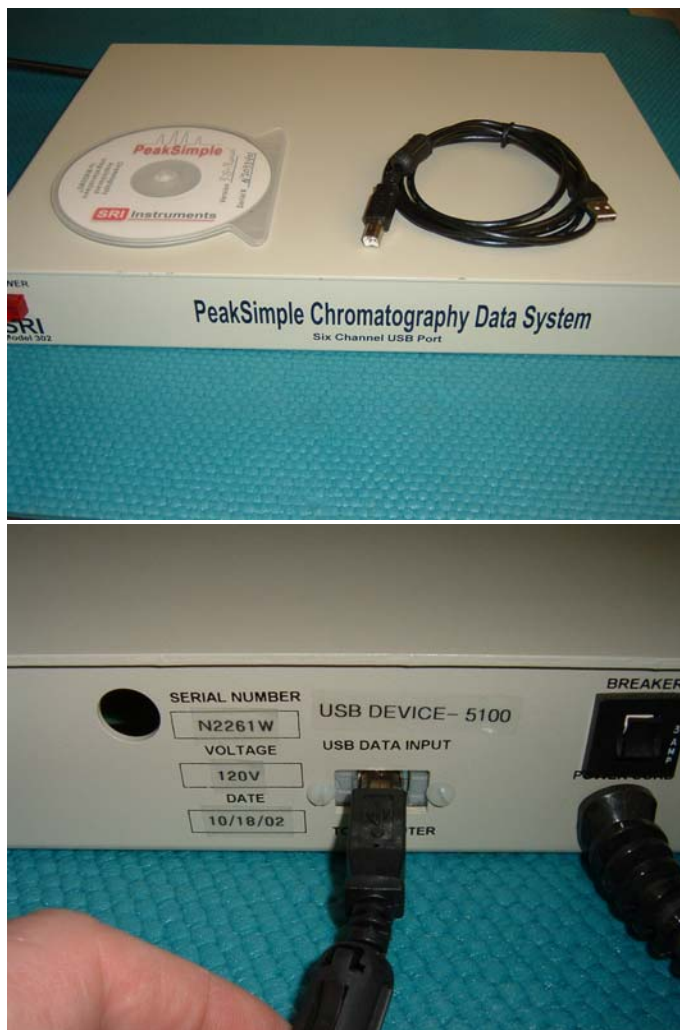
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When you click "Next" the PeakSimple software will be installed and you will see the screen to the right.
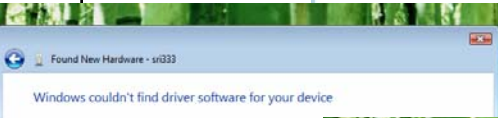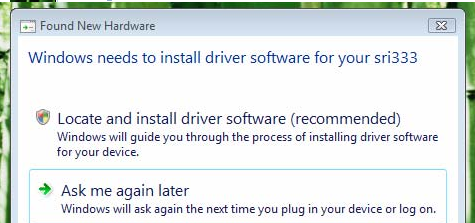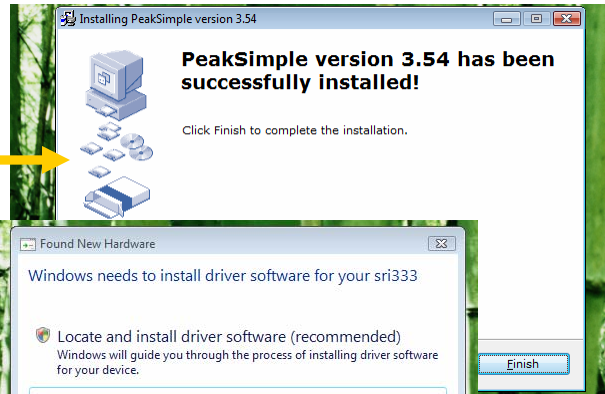Click "Finish"

Now connect the USB cable to your computer.

A hardware "Wizard" will appear to help you in-stall the USB driver. The example shown is for a Vista operating system.
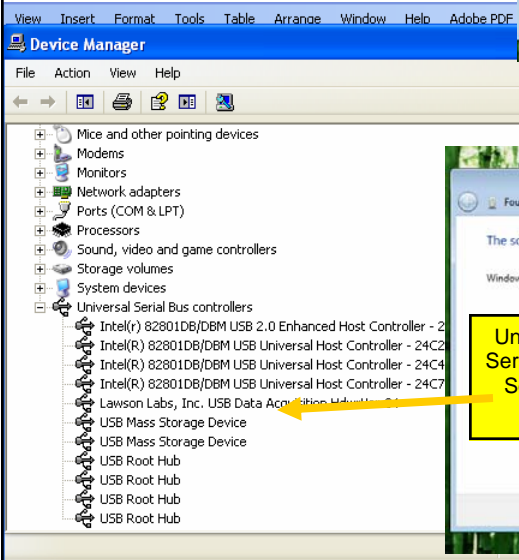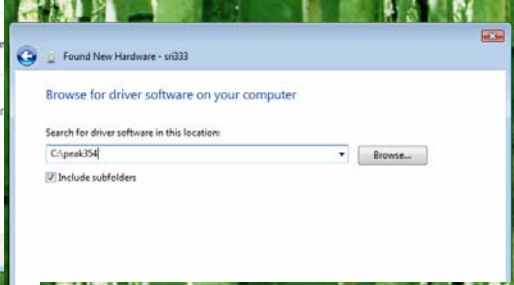***For XP computers the "wizard" screens will be slightly different.***
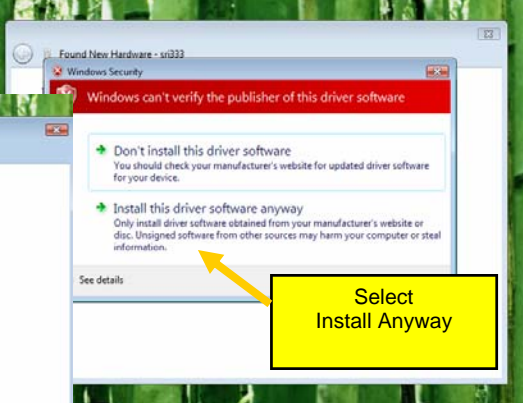
Follow the screens as shown

At the end of the process you can verify that the driver was installed by looking at the "Device Manager" screen in the "Control Panel"
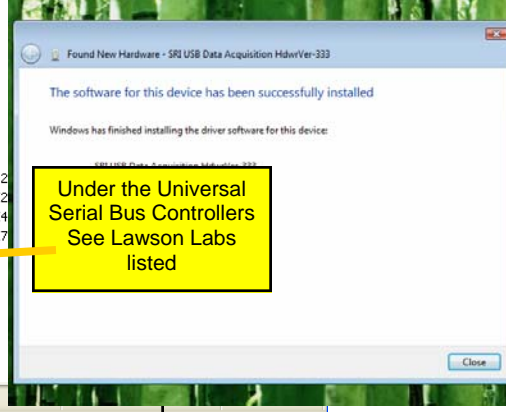
Installing PeakSimple version 3.54

PeakSimple version 3.54 has been successfully installed!

Click Finish to complete the installation.

Finish

Found New Hardware

Windows needs to install driver software for your sri333

Locate and install driver software (recommended)
Windows will guide you through the process of installing driver software for your device.

Ask me again later
Windows will ask again the next time you plug in your device or log on.

Don't show this messa...
Your device will not function...

Found New Hardware - sri333

Insert the disc that came with your sri333

If you have the disc that came with your device, insert it now. Windows will automatically search the disc for driver software.

Found New Hardware - sri333

Windows couldn't find driver software for your device

Check for a solution
Windows will check to see if there are steps you can take to get... working.

Browse my computer for driver software (advan...
Locate and install driver software manually.

ow me other options.

Found New Hardware - sri333

Browse for driver software on your computer

Search for driver software in this location:

C:\peak354   ▼   Browse...

☑ Include subfolders

> Browse at this point to the PeakSimple folder (c:\peak354) Since this is where the driver file is located.

Found New Hardware - SRI USB Data Acquisition HdwrVer-333

The software for this device has been successfully installed

Windows has finished installing the driver software for this device:

SRI USB Data Acquisition HdwrVer-333

Close

Windows Security

Windows can't verify the publisher of this driver software

Don't install this driver software
You should check your manufacturer's website for updated driver software for your device.

Install this driver software anyway
Only install driver software obtained from your manufacturer's website or disc. Unsigned software from other sources may harm your computer or steal information.

See details

> Select Install Anyway

View Insert Format Tools Table Arrange Window Help Adobe PDF

Device Manager

File Action View Help

⊞ Mice and other pointing devices
⊞ Modems
⊞ Monitors
⊞ Network adapters
⊞ Ports (COM & LPT)
⊞ Processors
⊞ Sound, video and game controllers
⊞ Storage volumes
⊞ System devices
⊟ Universal Serial Bus controllers
    Intel(r) 82801DB/DBM USB 2.0 Enhanced Host Controller - 2...
    Intel(R) 82801DB/DBM USB Universal Host Controller - 24C2...
    Intel(R) 82801DB/DBM USB Universal Host Controller - 24C4...
    Intel(R) 82801DB/DBM USB Universal Host Controller - 24C7...
    Lawson Labs, Inc. USB Data Acquisition HdwrVer-3...
    USB Mass Storage Device
    USB Mass Storage Device
    USB Root Hub
    USB Root Hub
    USB Root Hub
    USB Root Hub

> Under the Universal Serial Bus Controllers See Lawson Labs listed
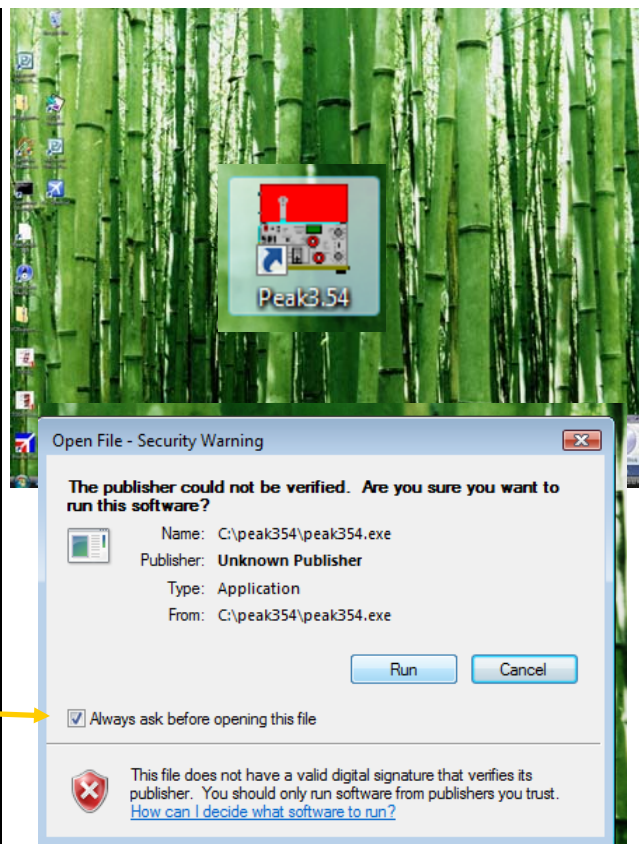
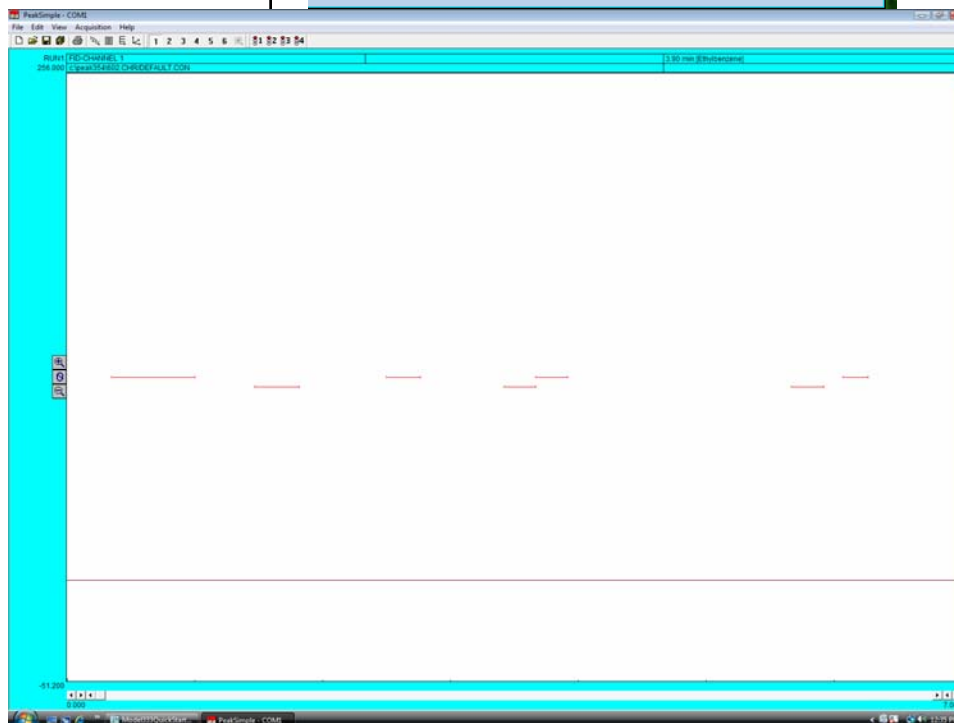# Model 302 Six Channel USB Chromatography Data System Quick Start Tutorial

Click on the PeakSimple icon (which will be somewhere on the Windows Desktop screen) to launch PeakSimple.

This warning will appear, but click "Run " anyway.

You can un-check this box to avoid this message in the future.

The PeakSimple screen will look like this.

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Use your mouse to click on "Edit" and then "Overall…"

In the "Overall… " screen enter the "Board Type" (302) and then the "USB device number".

The USB device number is a unique number which identifies this particular 302 board. Because each 302 board has a unique number you can operate several of them independently on one single computer . The USB device number is printed on the back of the 302 box and also on the USB controller chip on the 302 board.
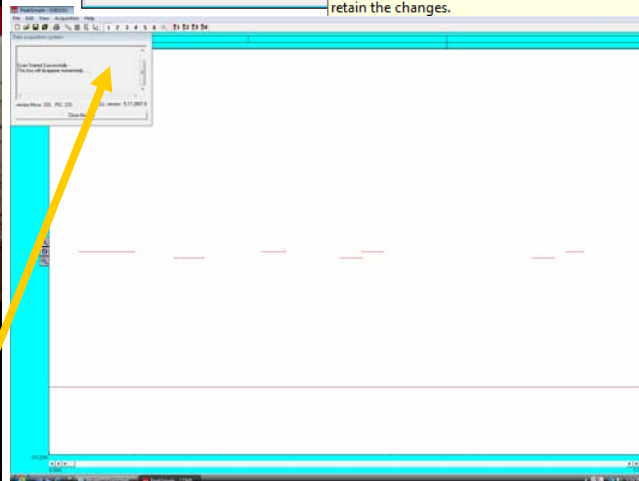
On a GC the device I.D.# is printed next to the USB jack on the side on the instrument.

When you click "OK" you will see a box on the top left of the screen which displays the calibration conversation PeakSimple has with the Model 302 board.
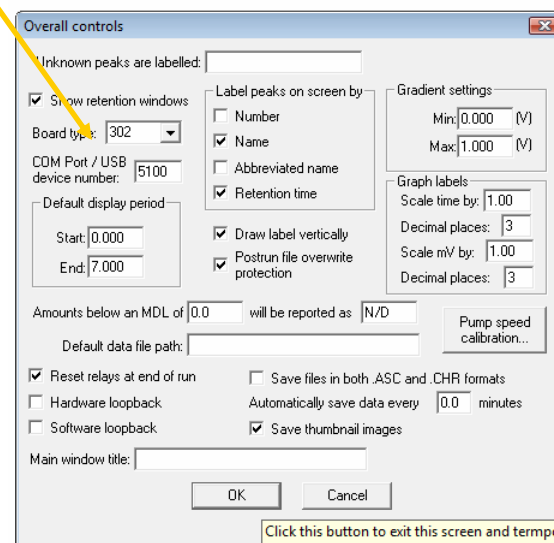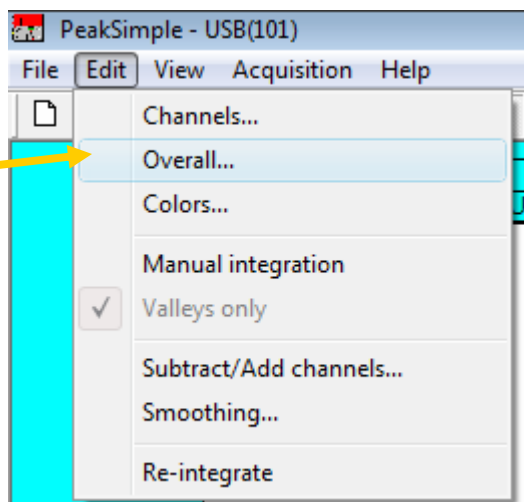
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Use your mouse to click on "Edit" and then "Channels" or just click on the "Channels Icon" which looks like the numbers 1,2,3,4.

In the "Channels" screen verify that the "Active" checkbox for channel 1 is checked.

Then click "OK" to get back to the main screen.

If PeakSimple has successfully established communication with the 302 board, then the word " STAND BY" will appear on the top right of the screen with the detector signal value (in millivolts mV) just to the right. In the example to the right the signal is 212.693 millivolts. This number will change slightly every second because of the system noise.

Click "File" and then "Save All" or just click the icon which looks like a stack of floppy disks to save everything you have entered so far. If you forget to do this you will have to repeat some of the information you have entered like the USB device ID.# next time you launch PeakSimple. Click Save All anytime you make changes to ensure PeakSimple remembers your changes.
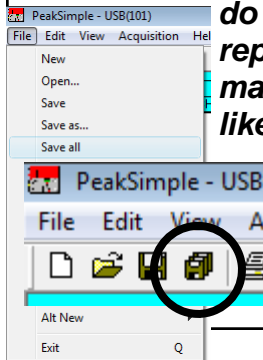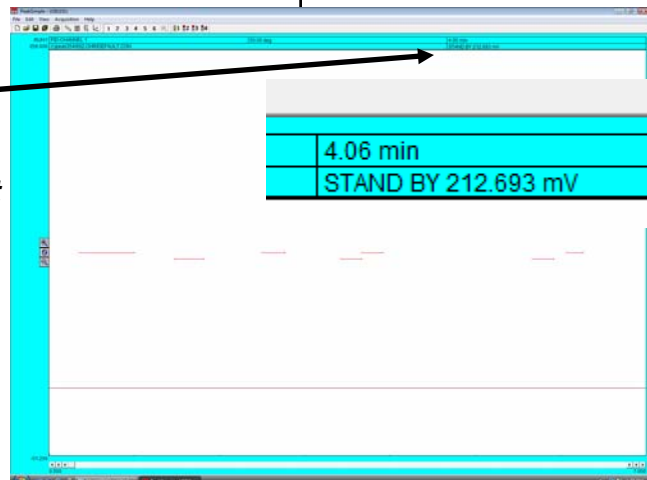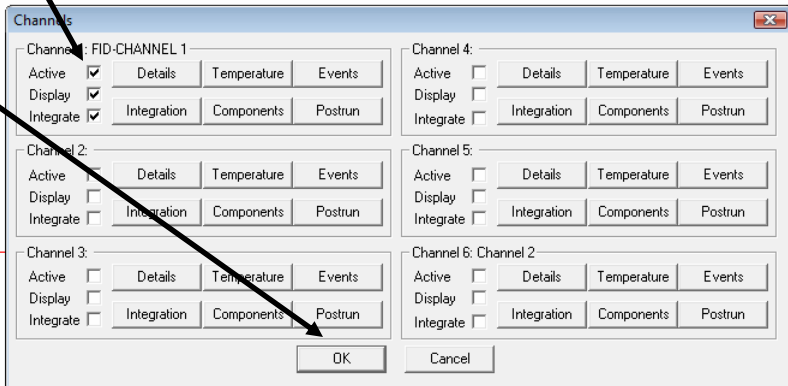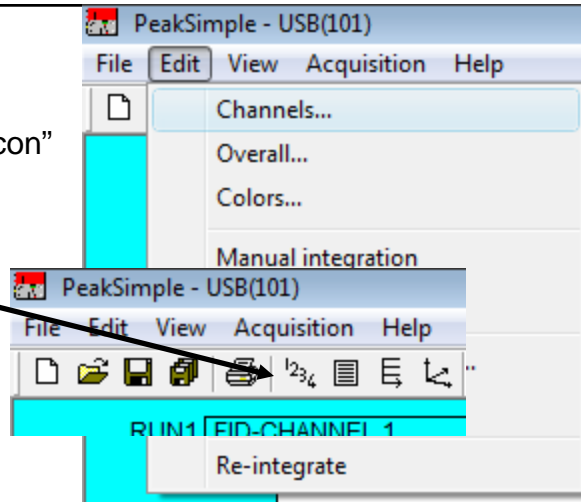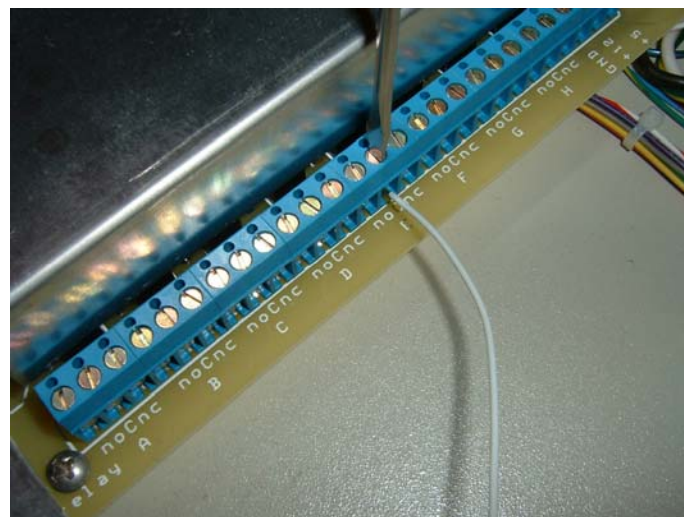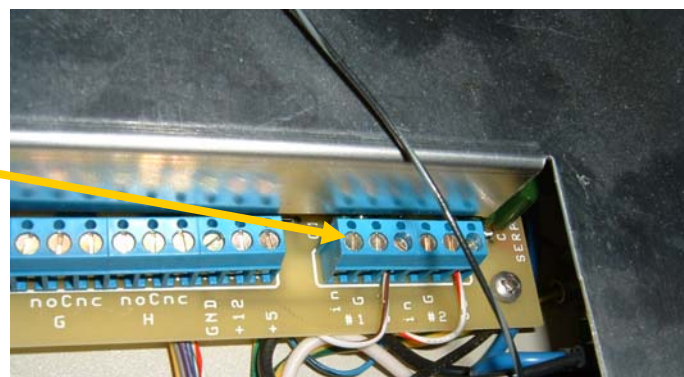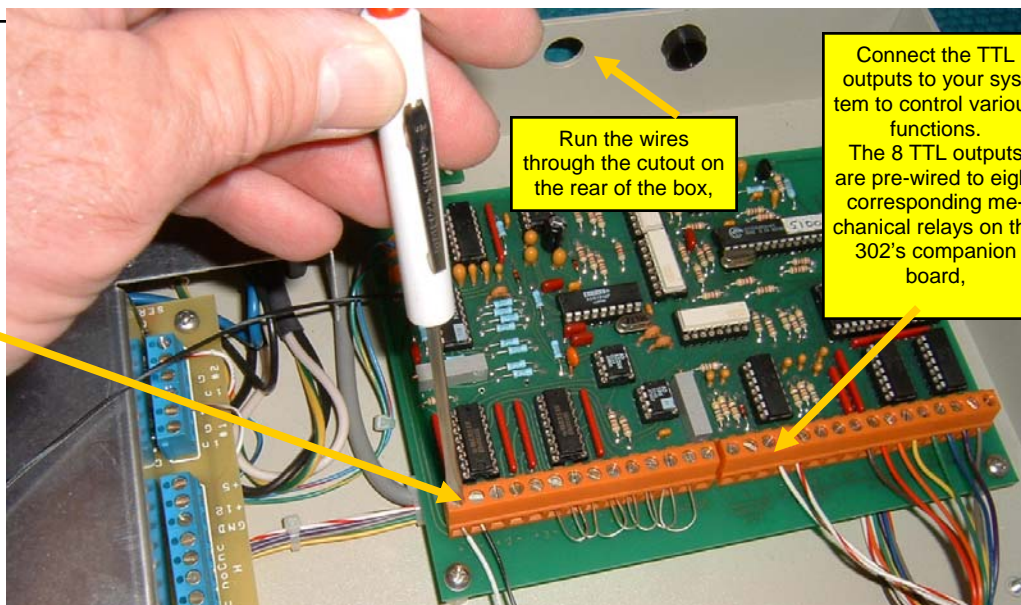
Connect the detector signals to the 302 board using the terminals labeled In+ and In- There are 6 sets of in+ and in– screw terminals

Choose the "Integrator", "Computer" or "Chart Recorder" output from your system. On attenuation 1, the " Chart Recorder" output is the same as the " Integrator" or "Computer" output.

Connect the "Remote Start" output from your instrument to the "in#1" (remote start) and G (ground) terminals on the 302 companion board. *This step is OPTIONAL, you do not have to use the Remote Start feature..*

Connect the TTL (relay) outputs to your system. For example, if you wanted to actuate a Valco valve on your GC you could use the TTL outputs to trigger the valve. You may use either the TTL (0-5 volts DC) outputs located on the A/D board or any of the eight pre-wired mechanical relays located on the companion board, Each mechanical relay has a common (C), normally open (NO) and normally closed (NC) screw terminal. *This step is also OPTIONAL, you do not have to use the TTL (relay) outputs..*

Run the wires through the cutout on the rear of the box,

Connect the TTL outputs to your system to control various functions. The 8 TTL outputs are pre-wired to eight corresponding mechanical relays on the 302's companion board,

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Press the "Spacebar" on your computer's keyboard to start the Run. (there are several ways to start the run including a "Remote Start"). The word " Stand By " will change to "Running" and the data line will be drawn on the strip-chart area of the main screen.

0.05 min
RUNNING 0.808 mV

The horizontal lines in the middle of the screen are the "Retention Windows" which is how the peaks are identified

Click the Auto-Zero button to bring the signal down to 0.00 millivolts (there are several ways to auto-zero the signal including an "Event" in the Event Table which auto-zeros the signal automatically at the beginning of the Run).

Auto-Zero button

The + and- buttons control the y-axis display limits

Channel 1 events
Channel1.evt

Time	Event
0.000	ZERO
0.000	SOUND
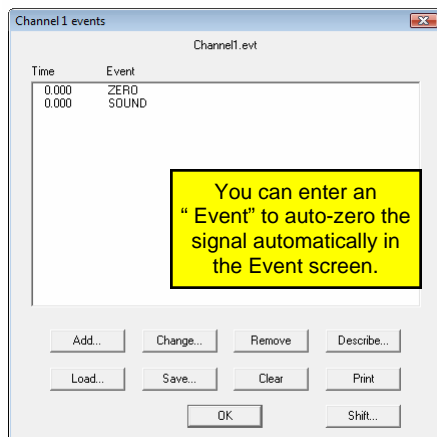
You can enter an " Event" to auto-zero the signal automatically in the Event screen.

Add... Change... Remove Describe...
Load... Save... Clear Print
OK Shift...

The " Run " will end at the time specified in the Channel Details screen unless you end it earlier by depressing the " End " key on the keyboard.

For more information download the PeakSimple tutorials on www.srigc.com or call SRI Tech Support at 310-214-5092

Channel 1 details
Description: FID-CHANNEL 1   End time: 7.000 min

Sample rate
- 1 Hz
- 2 Hz
- 5 Hz
- 10 Hz
- 20 Hz
- 50 Hz

Default display limits
Max: 256.000 mV
Min: -51.200 mV

☑ Remote start
Timebase
- 1
- 2
- 3
- 4

Control by
- Temperature
- Pressure
- Gradient

☐ Subtract baseline in channel: 1
☐ Overlay data in channel: 1
Relative retention shifts are based at: 0.000 min
Unretained solute time: 0.000 min
☐ Reverse polarity   ☐ Absorbance mode
Multiply norm area % results by 1.0000

Datalogger mode
☐ On
Offset: 0.000
Gain: 1.000
Decimal places: -1
(-1 for autoranging)

OK   Cancel