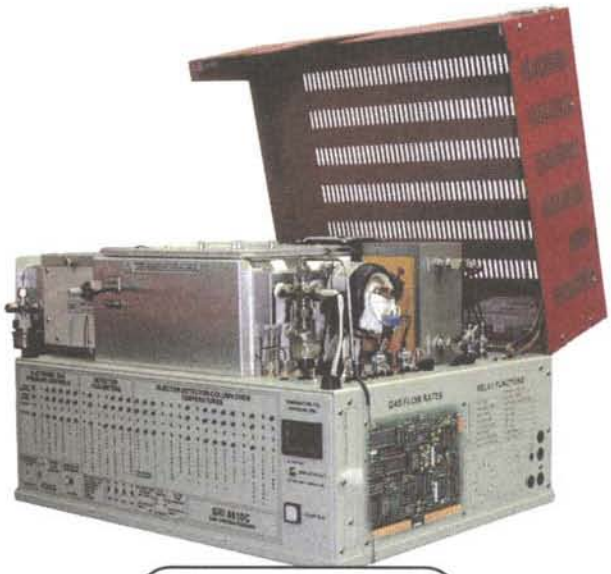
PeakSimple Chromatography Data Systems



4 channel data system built into an 8610C GC

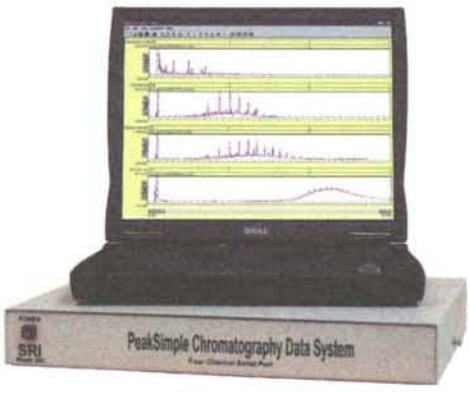
- ***Built into Every SRI HPLC, 8610 and 310 GC***
- ***Available separately for use with most GCs and HPLCs***
- ***Easy Connection to your Windows™ PC***
- ***1, 4, and 6 Channel Models available***
- ***PeakSimple Software Included***
- ***Serial port or USB models***

4 channel stand-alone data system

PeakSimple Chromatograpy Data Systems consist of hardware and software. The hardware is available as a stand-alone data system for connection to almost any model GC, HPLC or CE system. The same hardware is supplied as standard equipment with every SRI HPLC, 8610 and 310 GC. No hardware is installed in your computer, so a portable laptop may be used instead of a full-sized desktop PC. PeakSimple chromatography acquisition and integration software for Windows is provided with each data system, and updates are FREE from the SRI website: www.srigc.com. The data system hardware comes in three versions:

1) Single channel Model 203 for one detector
   (RS232 serial connection to PC or USB with optional adaptor)
2) 4 channel serial Model 202 for up to 4 detectors on 1 or 2 instruments
   (RS232 serial connection to PC or USB with optional adaptor)
3) 6 channel USB Model 302 for up to 6 detectors on 1-4 instruments
   (USB connection to PC)

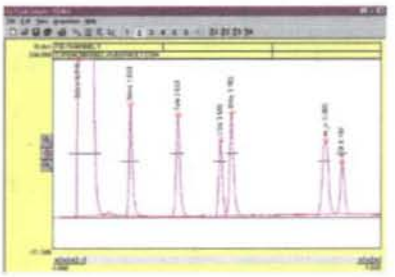
All three models use the same PeakSimple software.



HROMalytic SRI
Catalog #200-'07 ECHnology
Australian Distributors . . . www.chromtech.net.au

Model 203 Single Channel Data System

- ***Easy Serial Port Connection to your Windows™ PC***
- ***Eight TTL Outputs and One Remote Start Input***
- ***Eight optional Contact Closures***
- ***Includes PeakSimple Software***



The Model 203 is standard in every 8610, 410 or 310 GC and 210 HPLC. It can also be mounted in a separate box, ready for connection to other manufacturers' GC or HPLC detectors. The Model 203 Data System consists of PeakSimple for Windows software and a single channel, 20-bit high resolution A/D board.

When mounted in an SRI GC, the Model 203 controls the column oven temperature program, and the pressure program of the carrier gas electronic pressure controller (EPC). The eight available TTL outputs are connected internally within the GC to control functions such as valve rotation, gas solenoid actuation, autosampler injection, etc.

When mounted in a separate box, the temperature and pressure control outputs are available for use, but not connected to anything. The eight TTL outputs can optionally be wired to a bank of eight single-pole, dual-throw mechanical relays with screw terminals for easy connection to any user device which operates from a contact closure. A remote start input allows run initiation from the user's GC or HPLC system. Data can be acquired at rates up to 50Hz.

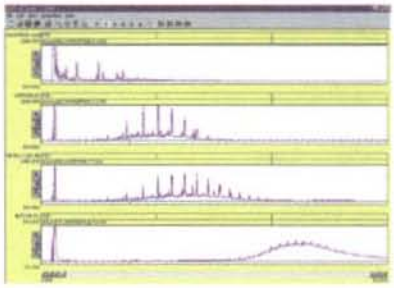
The 220 volt system is supplied with a UL, CSA, and CE/VDE approved universal power supply, which will operate on any AC voltage from 100-250 volts. For computers with USB ports only, USB PDA/Serial Adaptors, which allow serial peripherals to interface with USB computers, are available for about $40US.

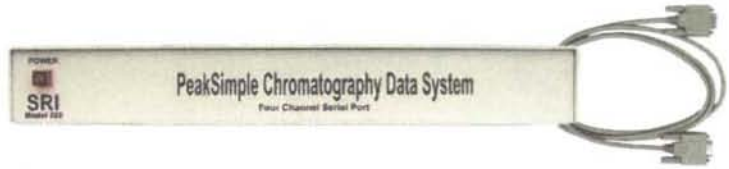
8600-1055	**Model 203 Single Channel Data System**
8600-1255	**Model 203, 220VAC**
8600-1056	**Optional relay board** (with 8 contact closures)

HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au

Model 202 Four Channel Data System

- ***4 Channels, 2 separate Time Bases, 2 Remote Start Inputs***
- ***Independent Start & Stop times for 2 separate instruments***
- ***Easy Serial Port Connection to your Windows™ PC***
- ***Includes PeakSimple Software***





The Model 202 can be mounted inside the 8610, 410 or 310 GCs and the 210 HPLC, or it can be mounted in a separate box, ready for connection to other manufacturers' GC or HPLC detectors. The Model 202 Data System consists of PeakSimple for Windows software and a four channel, 24-bit high resolution A/D board.

When mounted in an SRI GC, the Model 202 controls the column oven temperature program, and the pressure program of the carrier gas electronic pressure controller (EPC). When mounted in the Model 210 HPLC system, the Model 202 controls the pump speed and gradient profile. The eight available TTL outputs are connected internally within the GC or HPLC to control functions such as valve rotation, gas solenoid actuation, autosampler injection, etc.

When mounted in a separate box, the temperature, pressure, and gradient control outputs are available for use, but not connected to anything. The eight TTL outputs are wired to a bank of eight single-pole, dual-throw mechanical relays with screw terminals for easy connection to any user device which operates from a contact closure. Two remote start inputs allow run initiation from the user's GC or HPLC system.

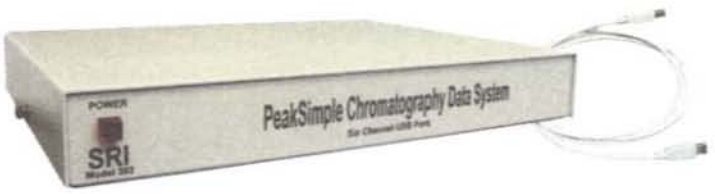
The four channels of data can be randomly assigned to one of two time bases, which allows independent start and stop times for two entirely separate instruments. Data can be acquired at rates up to 50Hz with one channel active, 10Hz for two channels, or 5Hz with all four channels activated and acquiring data. Windows computers with two available serial ports can operate dual Model 202 systems, for a total of eight data channels and four time bases from a single PC platform. For computers with USB ports only, USB PDA/Serial Adaptors, which allow serial peripherals to interface with USB computers, are available for about $40US.

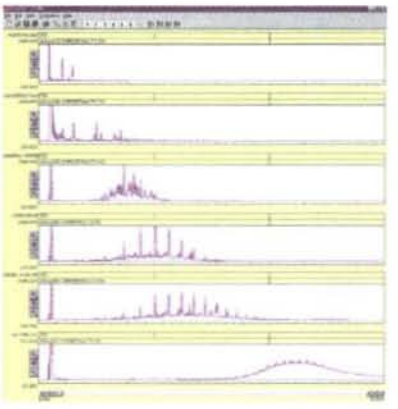
8600-4055	**Model 202 Four Channel Data System**
8600-4255	**Model 202, 220 VAC**

HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au

Model 302 Six Channel USB Data System

- ***6 Channels, 4 separate Time Bases, 4 Remote Start Inputs***
- ***Independent Start & Stop times for 4 separate instruments***
- ***Easy USB Connection to your Windows™ PC***
- ***Includes PeakSimple Software***





The Model 302 Data System is for analysts who prefer the hot-swappable, plug-and-play capabilities of Universal Serial Bus devices. The Model 302 can be mounted inside the 8610C or 310 GCs and the 210 HPLC, or it can be mounted in a separate box, ready for connection to other manufacturers' GC or HPLC detectors. The Model 302 Data System consists of PeakSimple for Windows software and a six channel, 24-bit high resolution A/D board.

When mounted in an SRI GC, the Model 302 controls the column oven temperature programs, and the pressure program of the carrier gas electronic pressure controller (EPC). When mounted in the Model 210 HPLC system, the Model 302 controls the pump speed and gradient profile. The eight available TTL outputs are connected internally within the GC or HPLC to control functions such as valve rotation, gas solenoid actuation, autosampler injection, etc.

When mounted in a separate box, the temperature, pressure, and gradient control outputs are available for use, but not connected to anything. The eight TTL outputs are wired to a bank of eight single-pole, dual-throw mechanical relays with screw terminals for easy connection to any user device which operates from a contact closure. Four remote start inputs allow run initiation from the user's GC or HPLC system.

Each of the six channels of data can be randomly assigned to one of four time bases, which allows independent start and stop times for four separate instruments. Data can be acquired at rates up to 50Hz per channel for 1 or 2 channels, or 20Hz for all 6 channels. The Model 302 is for use with Windows computers that have USB 2.0 ports (manufactured in 1998 or later).

8600-6055	**Model 302 Six Channel USB Data System**
8600-6255	**Model 302, 220 VAC**

HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au

PeakSimple for Windows™ Software

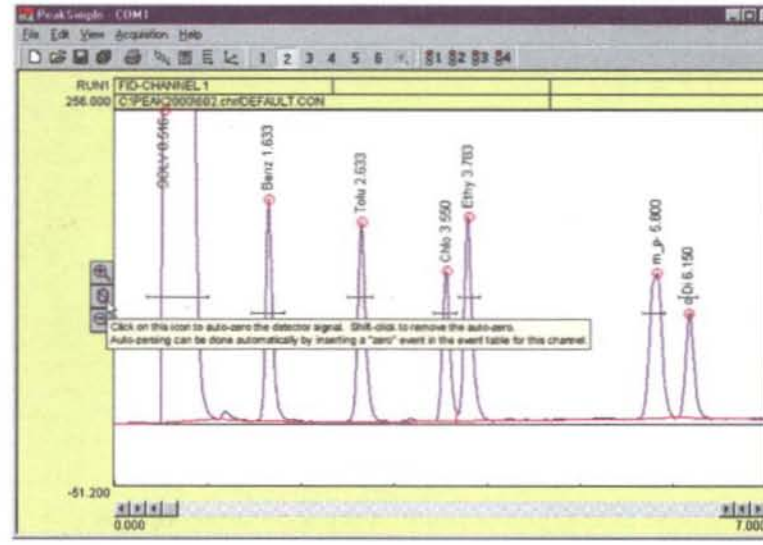
- *Easy to Learn, Easy to Use*
- *Packed with State-of-the-Art Features*
- *Updates are FREE to download Online*
- *Free Technical Support*

PeakSimple software has been continuously developed, refined, and improved since 1988 by a dedicated team of working chromatographers. These chromatographers use the software on a daily basis, and strive to simplify and enhance every aspect of PeakSimple so our customers will benefit. New features are added to PeakSimple several times per year, and the latest version is always FREE to download online, along with helpful tutorials. When you call SRI technical support, a knowledgeable technician will answer your questions right away. No complicated phone menus, and no waiting on hold!

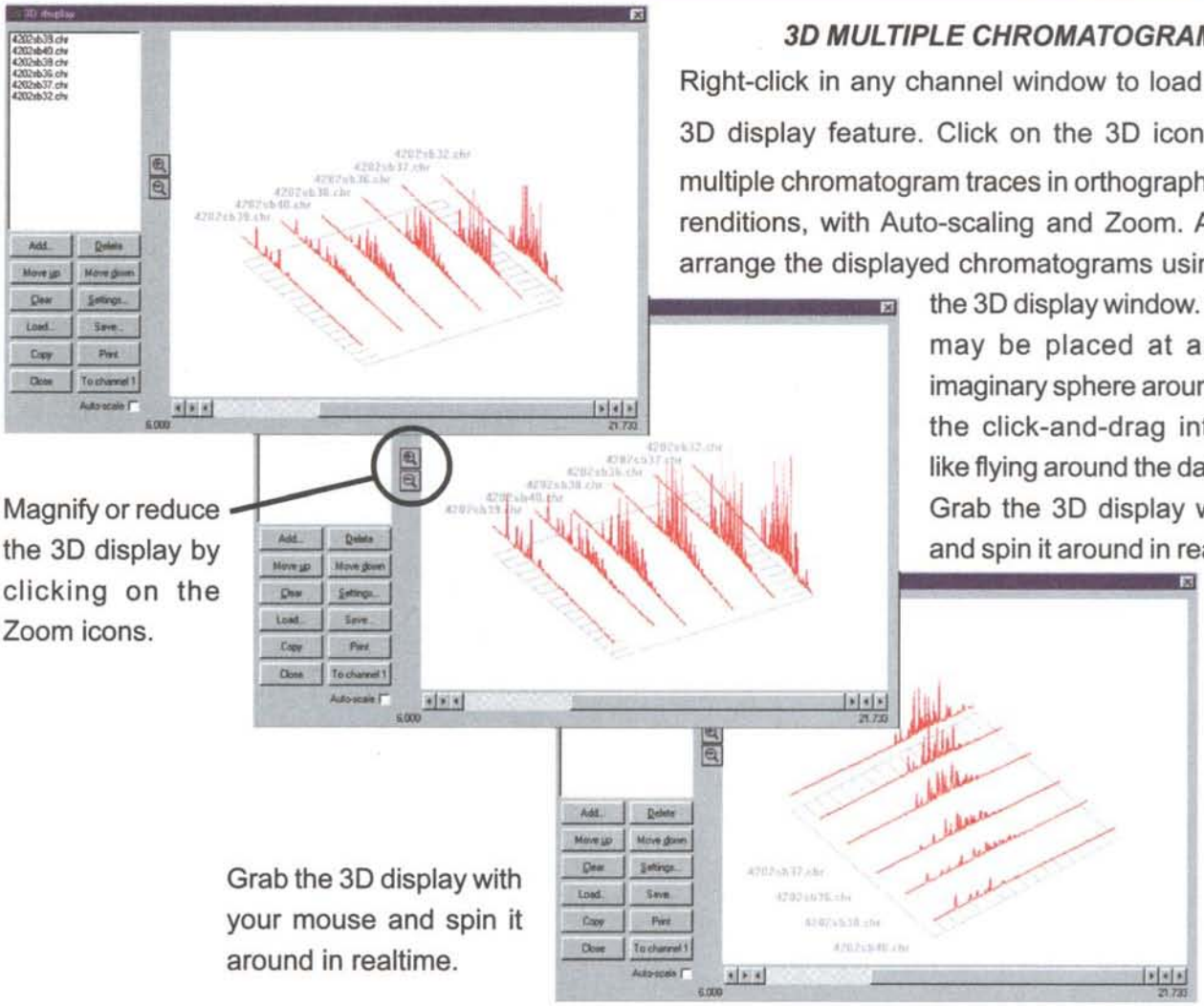
FEATURES:

3D Multiple Chromatogram Display	***Report Generation***
Built-in FTP capability	***Multi-level Calibrations***
Click & Drag Retention Windows	***Data Merge across channels***
Baseline Subtraction	***Autosampler Queue***
Chromatogram Overlay	***Batch Reprocessing***
DDE Links	***Built-in Data Validation***
Peak Alarms	***...and more!***

Most PeakSimple functions are launched from the chromatogram window, and are so user friendly that most operators can produce results almost immediately. ToolTips makes learning your way around PeakSimple even easier—just hold your mouse cursor over any icon or checkbox to read the onscreen How-To instructions.



HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au



Magnify or reduce the 3D display by clicking on the Zoom icons.

Grab the 3D display with your mouse and spin it around in realtime.

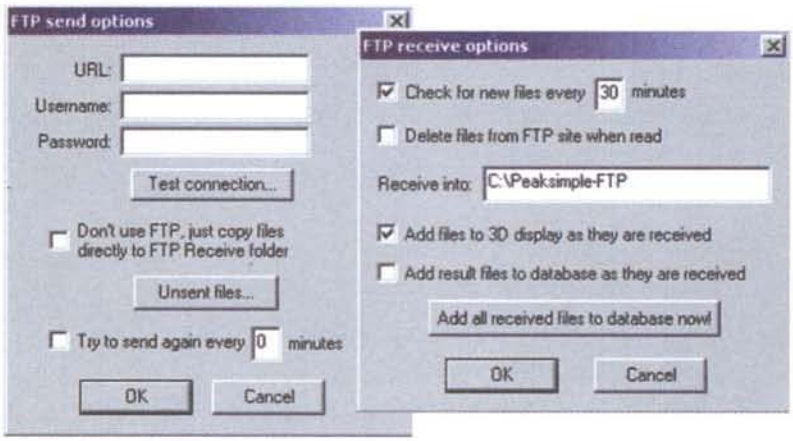
3D MULTIPLE CHROMATOGRAM DISPLAY

Right-click in any channel window to load its data into the 3D display feature. Click on the 3D icon to display multiple chromatogram traces in orthographic or perspective renditions, with Auto-scaling and Zoom. Add, delete, and arrange the displayed chromatograms using the buttons in the 3D display window. The point of view may be placed at any point on an imaginary sphere around the data, using the click-and-drag interface—almost like flying around the data in a helicopter. Grab the 3D display with your mouse and spin it around in realtime. Print your 3D display, or copy it to your clipboard for pasting into Excel, Word, etc.

BUILT-IN FTP CAPABILITY

With PeakSimple's FTP capability, you can upload data at the end of every run via the Internet. Using this powerful feature, one person can monitor a GC network around the world. Compared to the ongoing cost of manning each individual instrument, the savings potential is significant.

PeakSimple provides several options for receiving files into the folder of your choice. PeakSimple can automatically check for new files at user-specified intervals. You can choose to automatically add files to a database as they are received, or add them manually with the click of a button. You can even choose to add files to the 3D display as they are received.

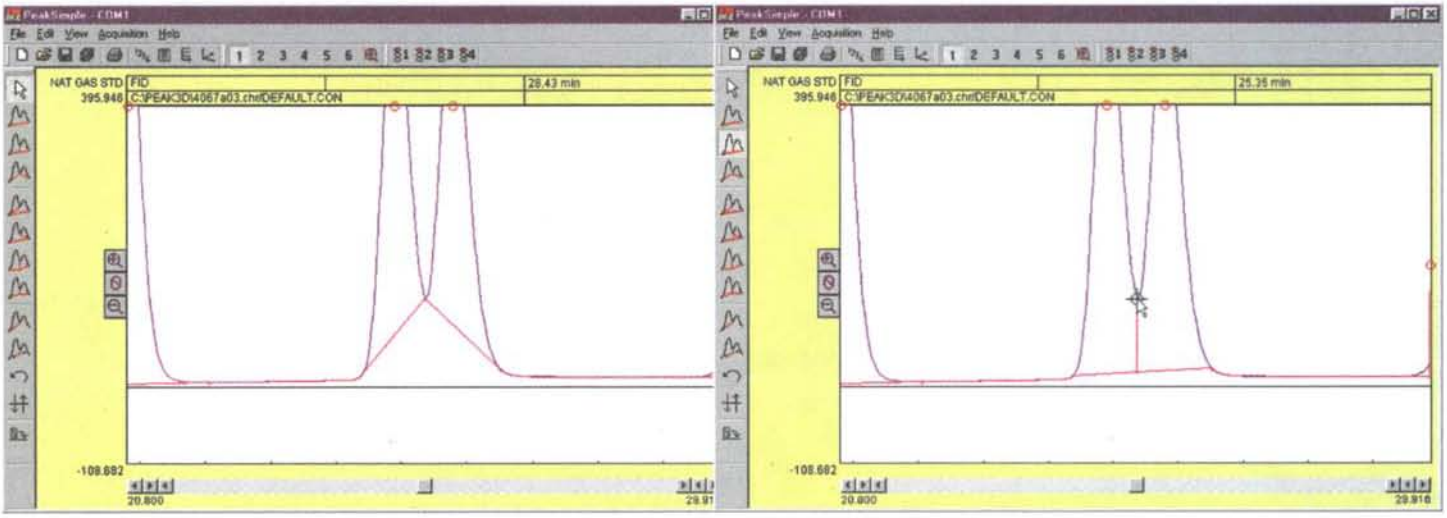


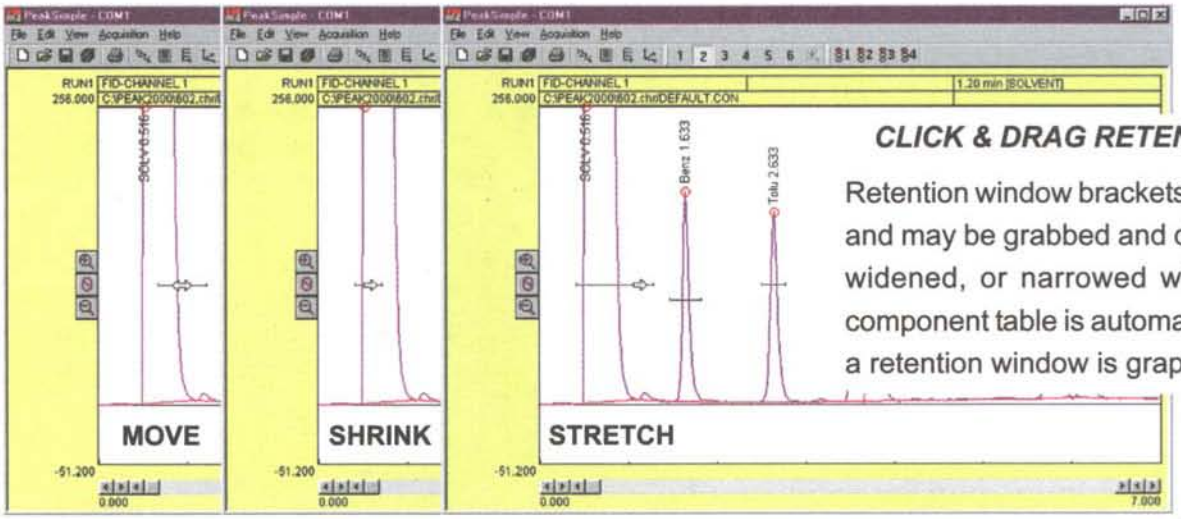
The number of instances of PeakSimple you can have running at one time is limited only by the resources of your computer. Therefore, you could monitor from your lab remote GC systems working anywhere they can connect to the Internet.

HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au

MANUAL INTEGRATION

Manual integration tools allow the user to refine the integration method applied to any peak. Baseline projection may be "rubber-banded" from point to point, forced to a valley, dropped vertically, skimmed, etc. The example below shows the use of the "Drop" tool to drop a vertical line from the valley of the conjoined peaks to the baseline.



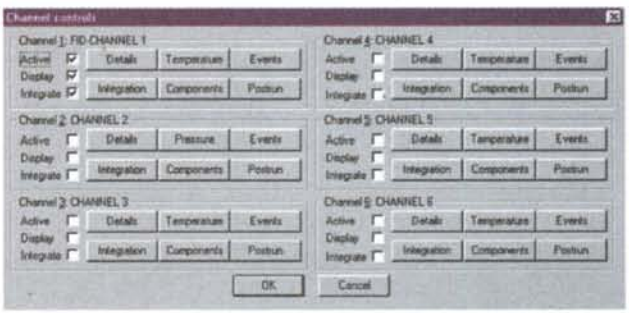


CLICK & DRAG RETENTION WINDOWS

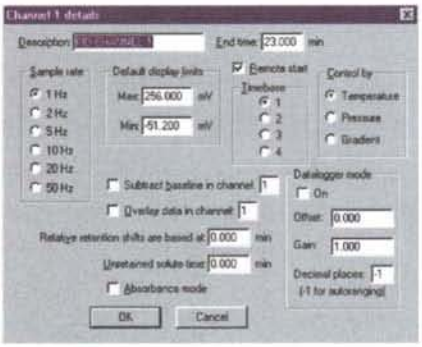
Retention window brackets are visible onscreen and may be grabbed and dragged onto a peak, widened, or narrowed with the mouse. The component table is automatically updated when a retention window is graphically modified.

CONTROL FILES

Save any changes you make in an analysis to a control file and use it again and again for method reproducibility. Control files contain temperature or gradient programming, component tables, external events, channel details, integration, postrun actions, and more! Create a control file for each method you typically perform. The number of control files you can have is limited only by your disk space.



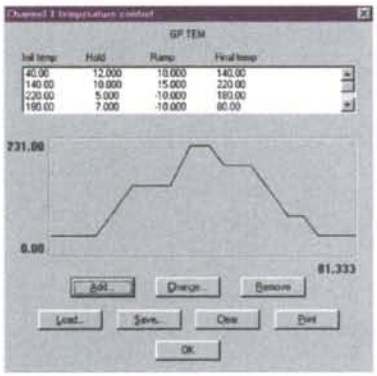
HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au



CHANNEL DETAILS

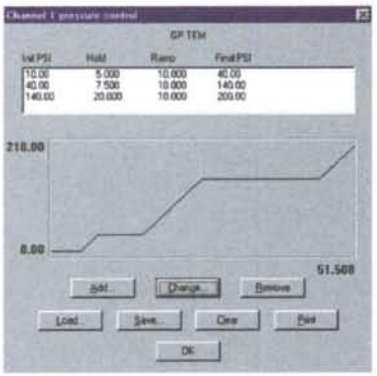
Operators can set channel parameters for each channel via the Channel details dialog box. Set the sampling rate and default display limits; choose temperature, pressure, or gradient control; subtract the baseline from another channel; overlay the data from another channel; turn Data Logger mode ON or OFF; designate a start time to compensate for relative retention shifts, and more.

TEMPERATURE, CARRIER PRESSURE, & HPLC GRADIENT PROGRAMMING



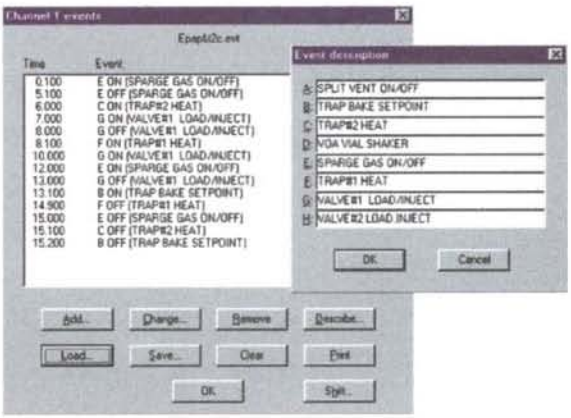
Program one or two SRI GC column ovens from ambient to 400°C with unlimited ramps and holds, 0.01 degree resolution, and negative programming.

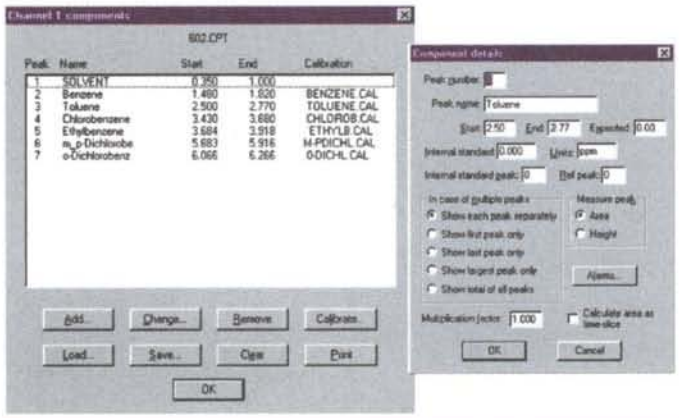
Program the carrier gas pressure with unlimited ramps and holds on SRI GCs equipped with electronic pressure control (EPC). Form binary HPLC gradients using SRI's Model 210 HPLC system.



MANUAL/AUTOMATIC EXTERNAL EVENT CONTROL

In addition to performing timed integration events, control up to eight external contact closure relay outputs to actuate sampling valves, autosamplers, solenoids, pumps, or any external device using TTL or relay contact closure triggers.





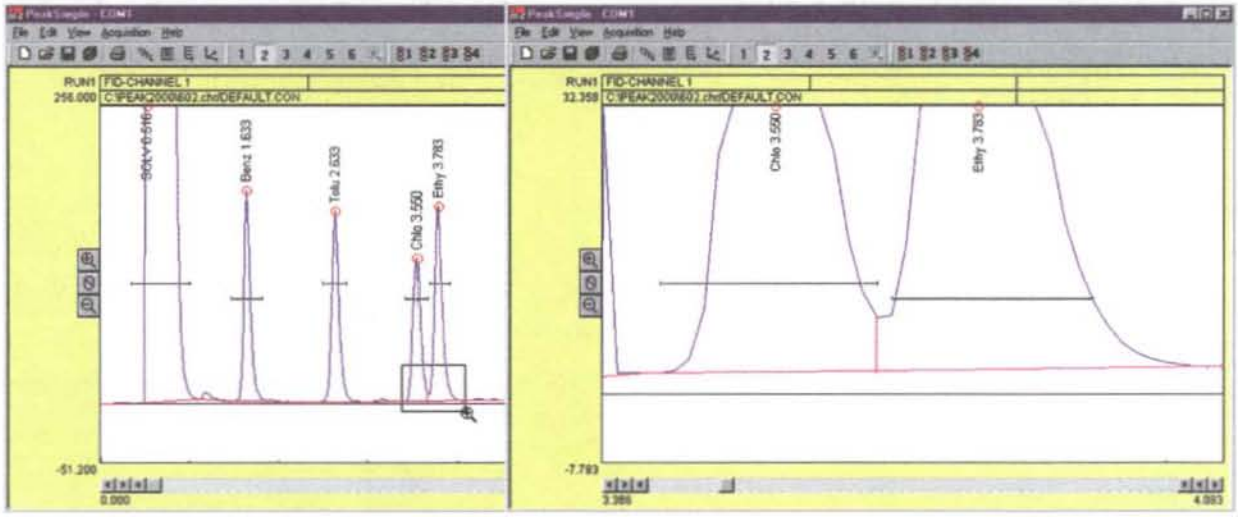
COMPONENTS

Create, save, and edit component tables with an unlimited number of compounds. Enter expected retention times, control peak display, and more! Component details may be viewed and edited by double-clicking on any retention window in the chromatogram, or by double-clicking on any component in the list.

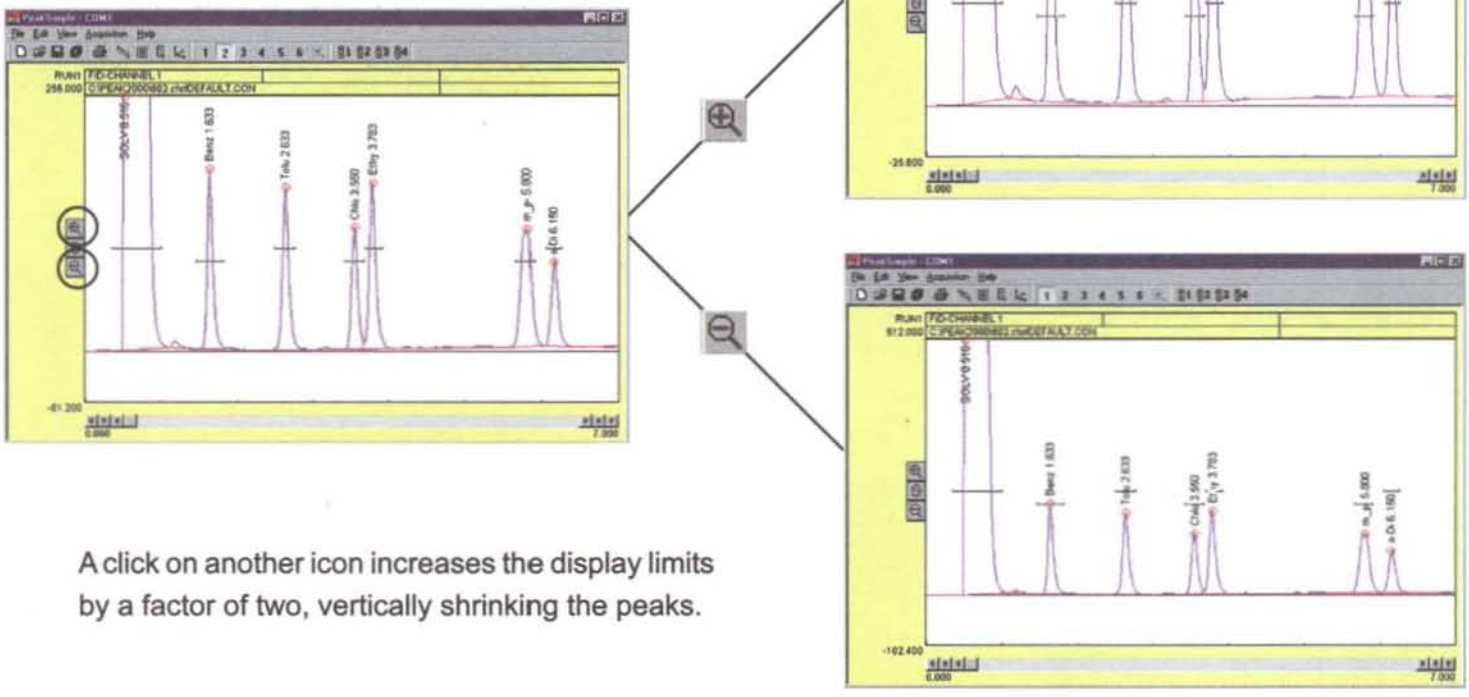
HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au

ZOOM TWO WAYS

Click and drag the mouse cursor to draw a rectangle around an area you wish to enlarge, and that area will expand to fill the chromatogram window. This may be done multiple times. Clicking on the unzoom icon in the toolbar unzooms the view one level at a time until it returns to the original resolution.



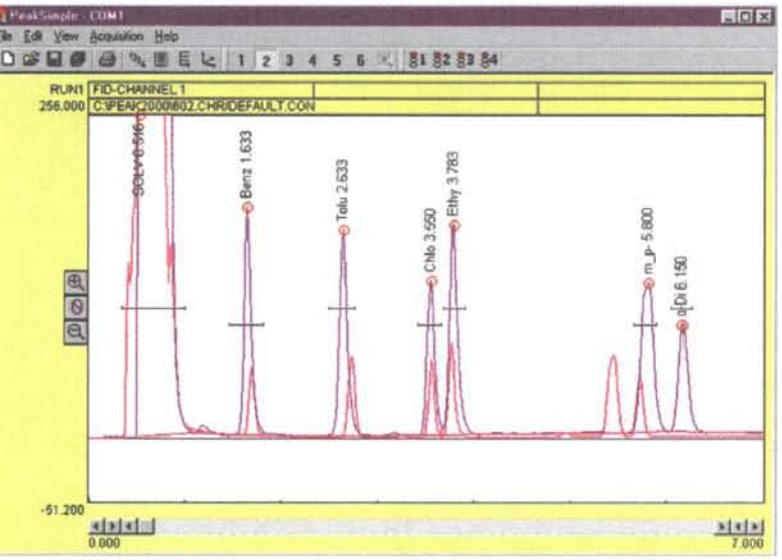
A mouse click on one icon vertically enlarges the peaks in the chromatogram, decreasing the y-axis display limits by a factor of two.



A click on another icon increases the display limits by a factor of two, vertically shrinking the peaks.

HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au

PeakSimple Software Features

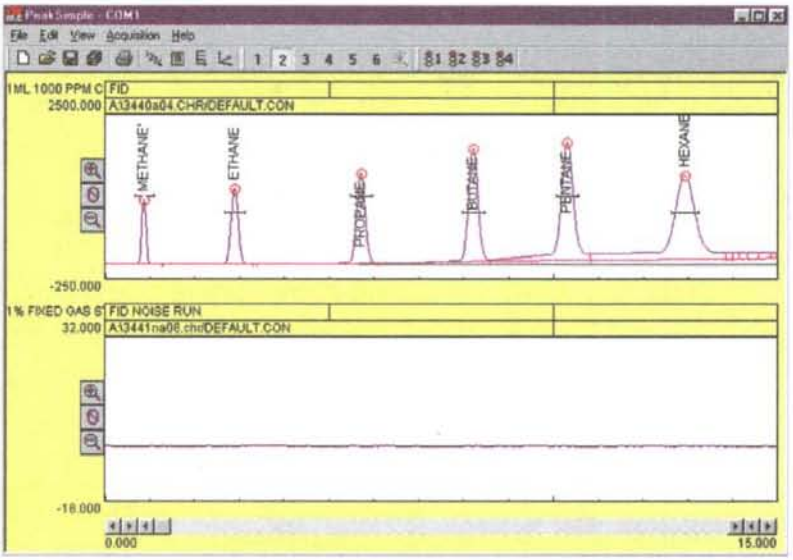


OVERLAY CHROMATOGRAMS

Overlay the data in any channel onto any other channel for retention time comparison or multiple detector correlation. The Overlay Adjust feature lets you shift and stretch overlaid data for pattern matching.

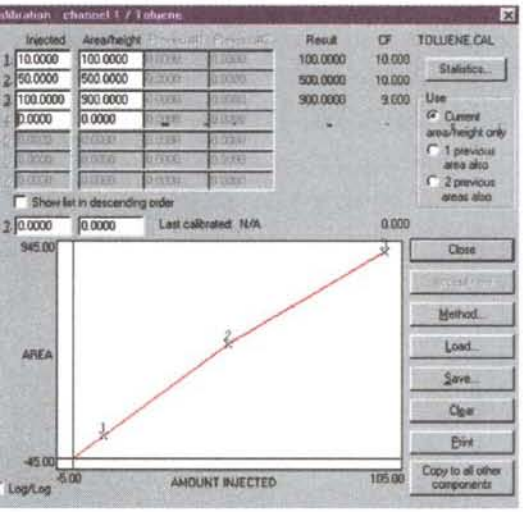
BASELINE SUBTRACTION and DATA SMOOTHING

Blank baseline subtraction is useful to compensate for baseline drifting due to column bleed and temperature ramping. PeakSimple lets you subtract baselines in real time as data is collected, or post run.



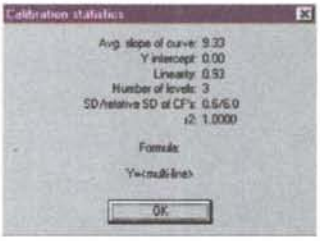
Noisy detector signals can be smoothed manually or automatically at the end of a run. Smoothing algorithms include Olympian, Moving Average, and Savitsky-Golay.

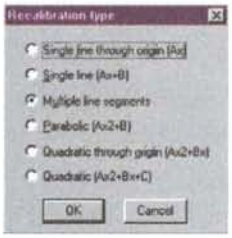
CALIBRATION



Calibration Averaging

PeakSimple allows up to three replicate calibration standards at seven levels of concentration to be averaged when constructing calibration curves.



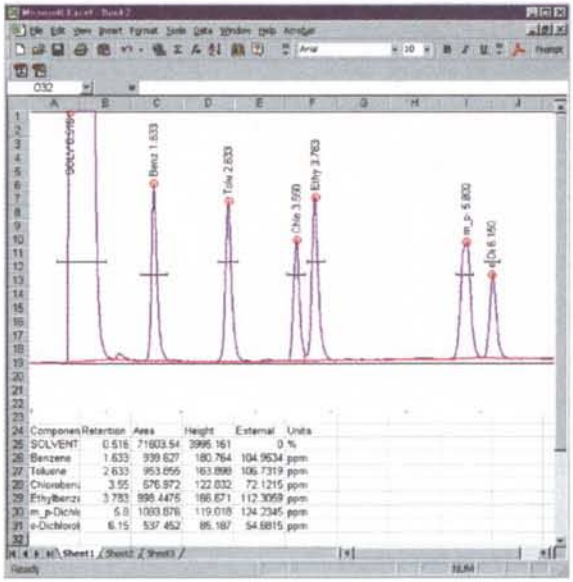


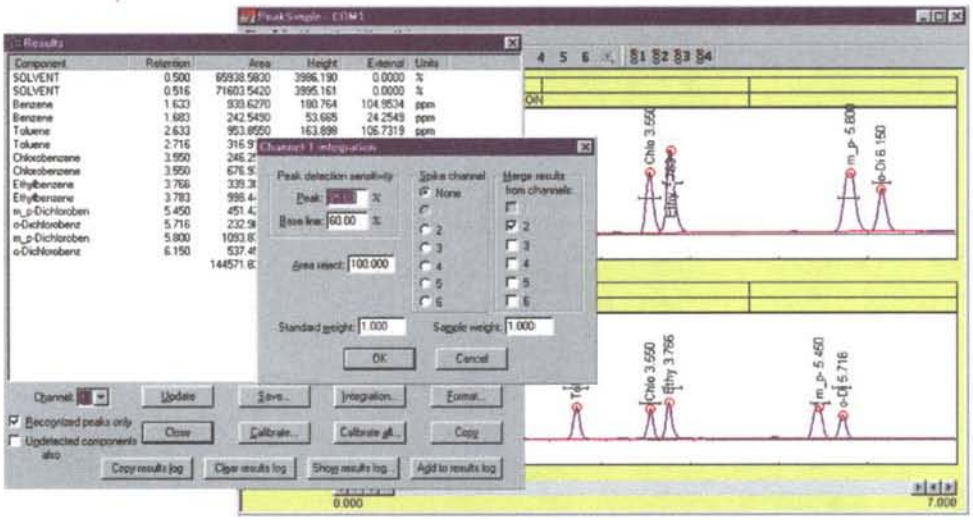
Multi-Level Calibration Curves

Calibrate peaks six ways (multi-line, quadratic, parabolic, etc) using single or averaged data at up to seven concentration levels. Statistics for evaluating line fit quality, modification date audit trail, and curve printout help to ensure defensible results.

DYNAMIC DATA EXCHANGE

Link PeakSimple to your DDE compatible spreadsheet or word processor (Excel, Word, etc.). Analytical results are automatically transferred after every run, or may be accumulated within PeakSimple and copied as a block of data. Use the Copy Picture option to paste the chromatogram itself into Excel, etc. along with the results.



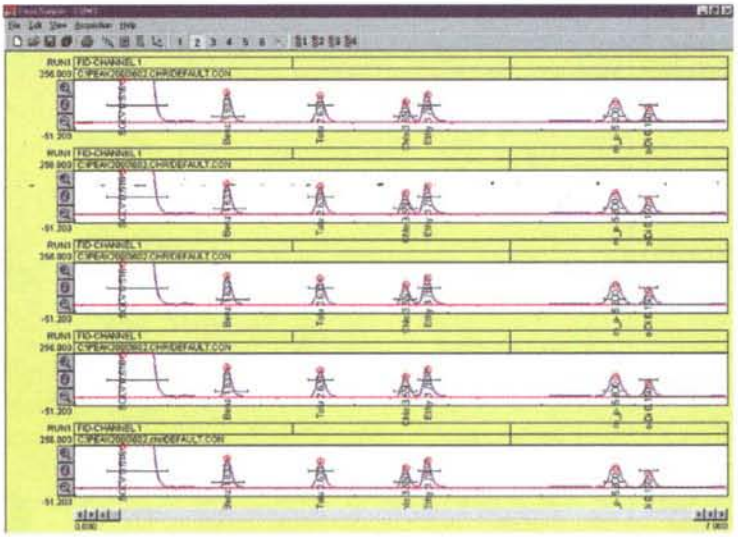


MERGE RESULTS FROM MULTIPLE CHANNELS

PeakSimple lets you merge the results from any or all channels into one report. This feature is useful for combining results from different detectors for export to Excel, etc.

SELF-VALIDATING HARDWARE

PeakSimple will play back and reacquire any chromatogram multiple times, establishing the precision and accuracy of the data system using real data, not "canned" chromatograms. PeakSimple's validation can be performed by the user anytime, without extra hardware.



HROMalytic SRI ECHnology
Catalog #200-'07
Australian Distributors . . . www.chromtech.net.au