PowerChrom Software

PowerChrom software running with PowerChrom hardware unit

- Your PC, or Mac, becomes a chromatography data workstation.
- No programming required – just plug and play
- Collect signals from one or two detectors
- Up to 24 bit resolution
- Match input range to your detector
- Manual or automatic peak editing
- Digital signal processing gives superior signal-to-noise ratios
- Raw data, method, and calibration all in one file

Description

PowerChrom® software runs on Windows or Macintosh computers for the collection, display and analysis of chromatographic data. It is used as part of a PowerChrom 280 system, but is also compatible with **e-corder**® 201 or 401 data recording systems.

Signals can be recorded from one or two chromatography detectors. Most detectors that have a 'recorder' or 'integrator' output are suitable.

Sophisticated digital signal processing ensures high–resolution, low–noise results.

Applications

PowerChrom is the ideal data acquisition software for upgrading your present GC or HPLC. Throw away paper recorders, integrators, and DOS–based systems, and update to the latest generation of computing technology.

Automatic or manual operation is possible (depending on you chromatograph configuration).

GLP

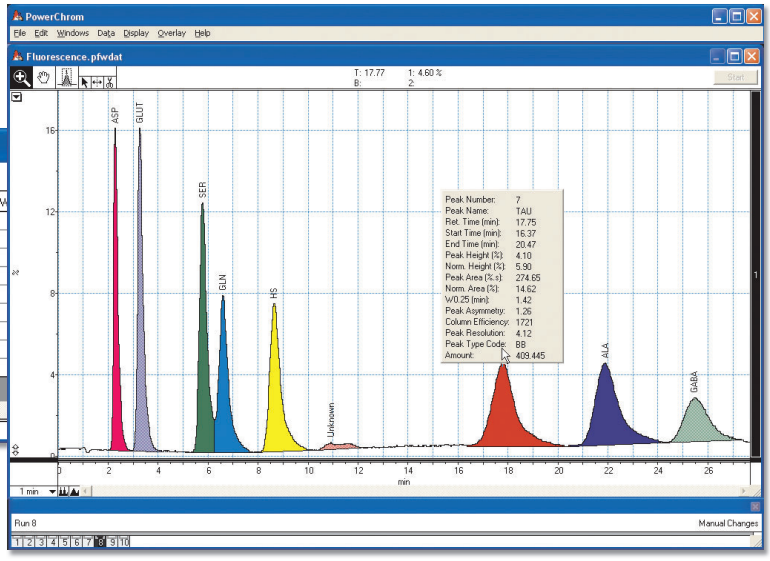
PowerChrom is designed to help you with good laboratory practice:

- All runs are date and time stamped.
- Methods used for data collection and analysis are recorded.
- Extensive annotation facilities store observations, and keep track of sample numbers etc.
- Data is saved to hard disk every thirty seconds, and can be recovered in the event of a power outage.
- All information (methods, calibrations, peak reports, as well as raw data) is stored in the one convenient data file, which can contain up to 999 runs!
- Files can be transferred between Windows and Macintosh computers.
- All intermediate versions of calibration tables can be accessed.

Peak Report for Fluorescence.pfwdat

	Channel 1									
Peak	Fill	Peak Name	tR (min)	tS (min)	tE (min)	H (%)	HNorm	A (%.s)	ANorm	V
1		ASP	2.27	1.95	2.85	15.81	22.73	198.86	10.58	
2		GLUT	3.25	2.85	4.12	15.83	22.77	251.81	13.40	
3		SER	5.77	5.10	6.25	12.25	17.62	264.97	14.10	
4		GLN	6.57	6.25	7.80	7.70	11.07	208.87	11.12	
5		HS	8.62	7.80	10.20	7.27	10.45	231.67	12.33	
6		Unknown	10.90	10.37	12.40	0.36	0.52	20.02	1.07	
7		TAU	17.75	16.37	20.47	4.10	5.90	274.65	14.62	
8		ALA	21.87	20.47	24.07	4.04	5.81	274.48	14.61	
9		GABA	25.45	24.07	27.35	2.18	3.14	153.39	8.16	
						69.54	100.00	1878.74	100.00	

Tables are presented in an easy-to-use spreadsheet format



PowerChrom has a user friendly interface

Export Friendly

You can export raw chromatograms (as graphics or tabular data), peak reports, method and sequence tables – to other graphing software, word processors, and spreadsheets.

Manual Peak Editing

For those truly difficult peaks, when adjusting automatic thresholds becomes time consuming, just use manual peak editing to add, delete, skim or otherwise directly edit a peak — just point and click!

Calibration Response Functions

Calibration curves can be fitted with linear, quadratic or even point-to-point (linear interpolation) response functions.

Sequences for Automation

Sequence documents can be used to automate a series of runs when used with a suitable autosampler.

Digital Signal Processing

PowerChrom oversamples the signal then averages the readings for each data point gathered. The signal-to-noise ratio is improved by a factor of √n when 'n' readings are averaged. For a noisy signal this can improve the signal quality by an order of magnitude, or more. Just as importantly, at data recording speeds of 40 /s or less, the signal is averaged over whole mains cycles (50 or 60 Hz mains power), which eliminates the effects of mains hum that is often the chief source of 'noise'. Thus you always get the highest quality data possible from your detector.

Computer Requirements

PowerChrom requires Windows 98, 2000, Me, XP or later.
MacOS 8.6 or later, including Mac OS X. The computer should have a minimum 128 MB RAM, and a USB 2.0 or 1.1 port.

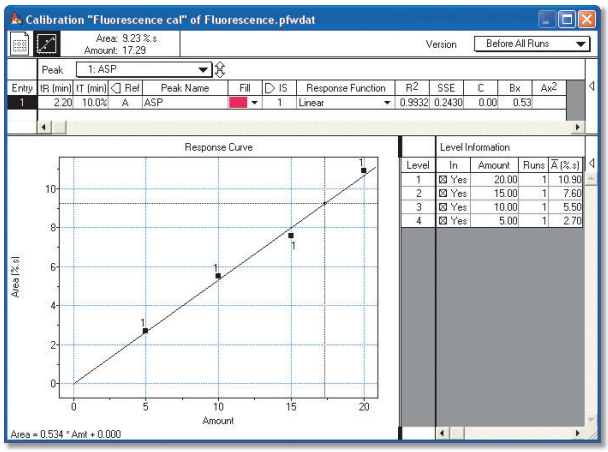
Specifications

Recording speed: 5 /min to 100 /s.
Signal resolution: up to 24 bit
Input ranges: ±2 mV to ±10 V
Number of runs in one file: 999 maximum
Oversampling rate: 10 kHz

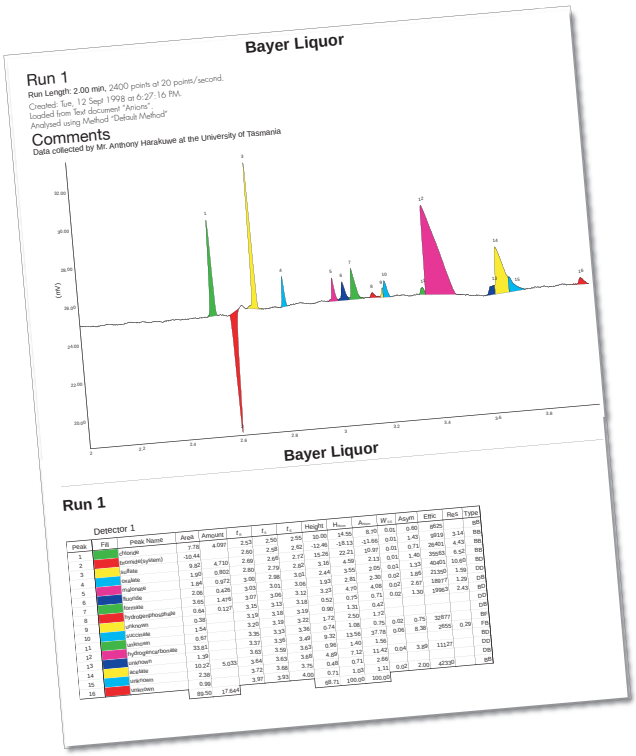
Ordering

PowerChrom software can be ordered as individual licenses (ES280) or as a departmental license (ES281).

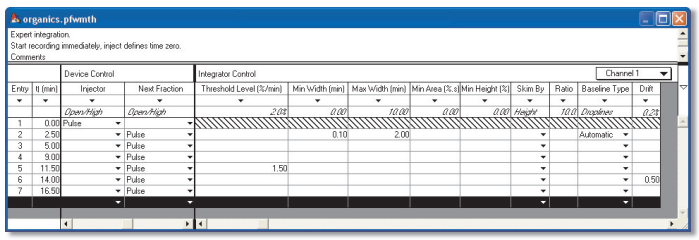
PowerChrom software is also supplied as part of the PowerChrom 280 system (ER280) which also includes the recording hardware unit.



Setting up a calibration response curve



Part of a PowerChrom report



Method Tables control data runs and integration parameters

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