

Chromatography Workstation



PC/Chrom is a complete package that interfaces your GC or HPLC detector to your personal computer or to a corporate network server. PC/Chrom reads the analog output signal from the detector, digitizes the signal, displays the chromatogram, and processes the data according to user specifications to produce a final report that can be printed. All hardware and software is included in the PC/Chrom package, including power supply and detector wiring.

Data Collection

Hardware

- Personal Computer Ethernet (TCP/IP) interface
- 1 to 4 independent time-based channels per computer
- High-resolution 24-bit analog-to-digital converter
- Data acquisition rates of 4, 8, 16, and 32 samples per second (Hz)
- Contact closure and TTL start signal support, or data acquisition may be initiated from the keyboard
- TTL Output event support
- Enclosed in external sturdy metal case

Software

- Windows 2000, XP, and Vista support
- Data collection may be initiated within a few seconds upon running PC/Chrom, either using default or recalling stored parameters
- PC/Chrom creates unique subdirectories for each data set of chromatograms, thus simplifying disk organizations. Each chromatogram is stored in an individual file within the specified directory
- Automatic peak integration and calculation of unknown sample concentrations

Developed for pharmaceutical professionals, by pharmaceutical professionals.

Data Analysis

Peak Integration

- Time Function Table driven automatic integration of peaks. Thus, perpendicular drops, tangent and pre-tangent skimming, and lumped peaks are supported. Automatic integration of peaks may be turned on and off at any time within the chromatogram.
- Reintegration of chromatograms is possible either manually or in a batch mode.
- Batch reintegration allows the user, at the touch of a key, to reintegrate an entire sequence of chromatograms according to an updated Time Function Table.
- Manual reintegration allows the user to select the peak start and stop times using mouse clicks.

Calculations

- Area and/or height calculations are supported.
- Internal Standard calculations are supported.
- Response factors may be entered to specify calibrations based on standards that are not present in the standard solution.
- Uncalibrated peaks may be quantitated using a specified standard.
- Single-level standards, with or without standard averaging, may be used to calculate sample concentrations.
- Multiple-level standards, using up to ten levels of standard concentrations, may also be used.

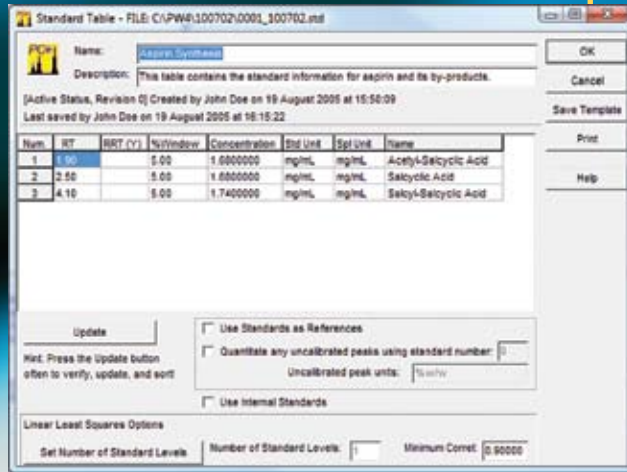
Reports

- Full report general capabilities, including printer, ASCII files, and spreadsheet files.
- In addition to the default chromatogram report, additional views are:
 - Alternating light and dark gray peaks
 - Peak asymmetry and half height lines drawn within the peak
- Chromatographic peaks may be labeled on the chromatogram with customizable combinations of:
 - Peak Height
 - Peak Name
 - Peak Area
 - Retention Time
 - Relative Retention Time
 - Peak Number

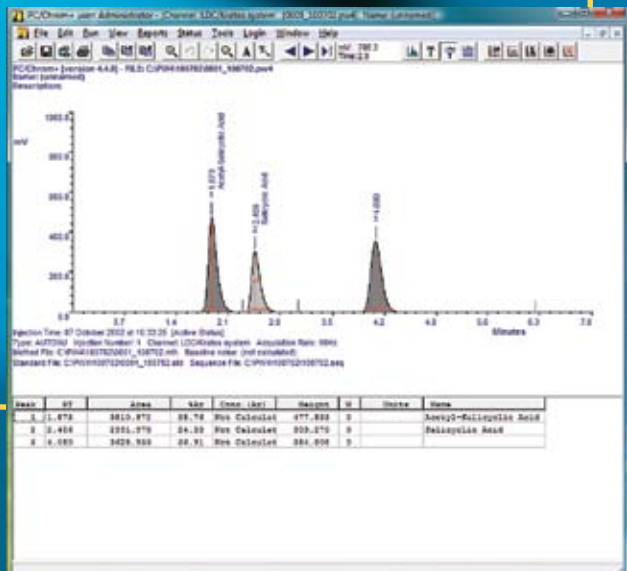
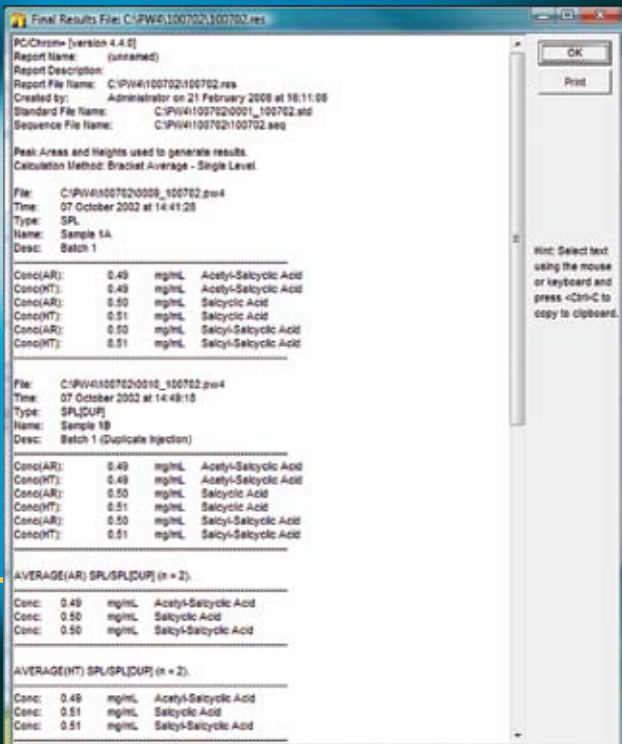
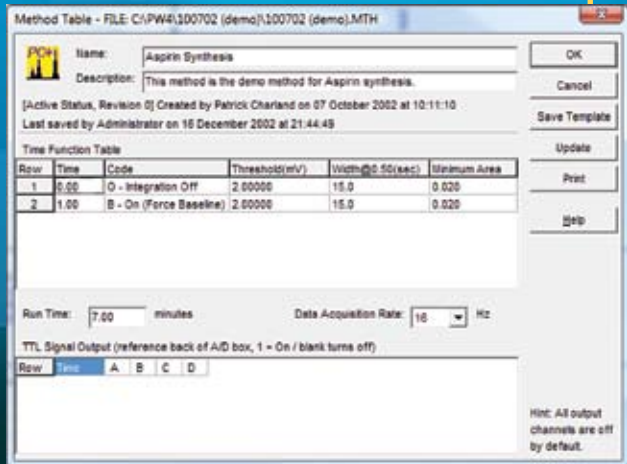
Reports

- Customizable chromatographic text report may include:
 - Retention Time and/or Relative Retention Time
 - Area and/or Percent (%) Area
 - Height and/or Percent (%) Height
 - Peak Width at Half Height
 - Peak Tailing at Five Percent of Height
 - Number of Theoretical Plates
 - Height Equivalent of Theoretical Plates
 - Number of Theoretical Plates per Meter
 - Peak Resolution
 - Peak Concentration Units
 - Peak Name

Method (Time Function Table) for use of automatic integration of peaks.



Up to 75 standards may be entered into the Standard Table. Each of the 75 standards may contain 10 concentration levels for use in multi-level calibration curves. Multiple internal standards may be specified per chromatogram.



Sequence - FILE: C:\PW4\100702\100702.seq

Name: Asprin Synthesis
 Description: This table is the sequence for Asprin and its by-products.
 (Active Status, Revision 1) Created by Patrick Charland on 07 October 2002 at 10:12:27
 Last saved by John Doe on 18 December 2002 at 21:41:23

Row	File Name	Name	Type	Method	Start1 (V0)	Start1 (V0)	MuR2	DivR2	Int.Std.Ratio	Description	M
1	C:\PW4\100702\0001_100702.gwd	Equilibrating	IGNORE	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	Ignore injection, column was equilibrating.	-
2	C:\PW4\100702\0002_100702.gwd	Equilibrating	IGNORE	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	Ignore injection, column was equilibrating.	-
3	C:\PW4\100702\0003_100702.gwd	System Suitab	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	System Suitability Injection #1	-
4	C:\PW4\100702\0004_100702.gwd	SS Injection 2	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	System Suitability Injection #2	-
5	C:\PW4\100702\0005_100702.gwd	SS Injection 3	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	System Suitability Injection #3	-
6	C:\PW4\100702\0006_100702.gwd	SS Injection 4	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	System Suitability Injection #4	-
7	C:\PW4\100702\0007_100702.gwd	SS Injection 5	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	System Suitability Injection #5	-
8	C:\PW4\100702\0008_100702.gwd	Standard	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	Standard Injection	-
9	C:\PW4\100702\0009_100702.gwd	Sample 1A	SPL	C:\PW4\100702\0001_100702.mn	1.000000	1.000000	1.000000	1.000000	1.000000	Batch 1	-
10	C:\PW4\100702\0010_100702.gwd	Sample 1B	SPL[DU]	C:\PW4\100702\0001_100702.mn	1.000000	1.000000	1.000000	1.000000	1.000000	Batch 1 (Duplicate injection)	-
11	C:\PW4\100702\0011_100702.gwd	Injecte Standar	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	Standard Injection	-
12	C:\PW4\100702\0012_100702.gwd	Sample 2A	SPL	C:\PW4\100702\0001_100702.mn	1.000000	1.000000	1.000000	1.000000	1.000000	Batch 2	-
13	C:\PW4\100702\0013_100702.gwd	Sample 2B	SPL[DU]	C:\PW4\100702\0001_100702.mn	1.000000	1.000000	1.000000	1.000000	1.000000	Batch 2 (Duplicate injection)	-
14	C:\PW4\100702\0014_100702.gwd	Final Standard	STD[A]	C:\PW4\100702\0001_100702.mn	N/A	N/A	N/A	N/A	N/A	Standard Injection	-

Update: Integrate Apply Standards Only
 Hint: Press the Update button often to verify, update, and sort
 Column Entry: Calculate Report

The injection sequence may be built either pre- or post-run. If it is built pre-run chromatograms are properly labeled and unknown sample concentrations are calculated in real time. The injection sequence may also be built post-run, allowing the user to calculate concentrations after all chromatography has been completed.

Additional Features

- System Suitability may be calculated using:
 - Retention Times
 - Peak Areas
 - Peak Heights
 - Peak Tailings
- Overlay of chromatograms is supported. The chromatograms may be zoomed in to the appropriate portion of the chromatograms.
- The raw chromatographic data files may be converted to ASCII files for export to other programs.
- The Analytical Instrument Association (AIA) netCDF standard file format is supported. Thus, PC/Chrom files may be converted to the AIA standard file format for use in other programs.
- Electronic Records — Audit Trails and password protection.

System Suitability
 GC/Chrom [version 4.4.0]
 Report created by Administrator on 21 February 2008 at 11:09:49

SYSTEM SUITABILITY REPORT
 Peak Areas

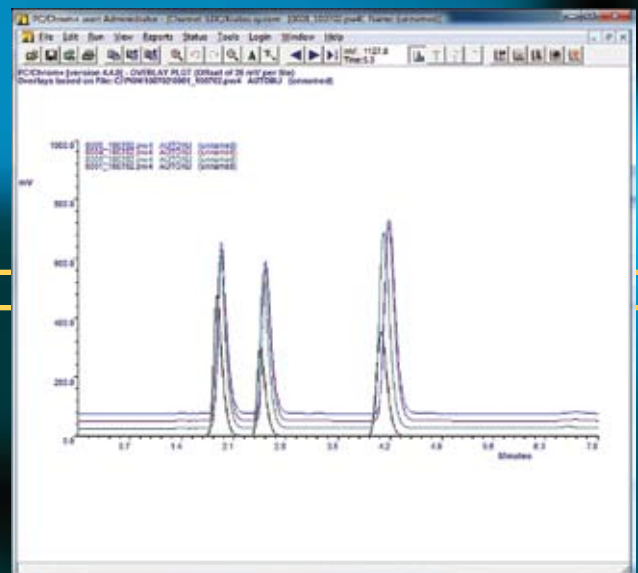
Data Directory: C:\PW4\100702*.gwd

File Name	Chromatogram Name
0003_100702	(unnamed)
0004_100702	(unnamed)
0005_100702	(unnamed)

Standard File: C:\PW4\100702\0001_100702.seq

#	Standard Name	1	2	3
1	Acetyl-Salicylic Acid	4662.286	4134.545	6793.240
2	Salicylic Acid	4662.289	4143.525	6776.186
3	Salicyl-Salicylic Acid	4669.860	4143.227	6793.650

Standard #:	1	2	3
File Name	0003_100702	0004_100702	0005_100702
RT	4664.543	4140.242	6787.629
SD	6.246	4.504	3.908
NRSD	0.093	0.111	0.147



Validation and Support

We supply Validation Certificates, Manuals, and Installation Qualification (IQ) documents with all options. We also offer additional consulting services in the form of User Acceptance validation documents and software testing.

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H&A Scientific, Inc. is continually maintaining and improving its established Quality Assurance Program which is designed to maintain compliance with requirements of FDA's Good Manufacturing Practices (GMPs).

Contact us for a free CD-ROM Demo.



For more information,
please visit our web site
www.hascientific.com or contact:

Daniel Robinson
Manager of Business Development
PO Box 8133, Greenville, NC 27835
Ph: +1.252.752.4315 ext. 204; Fax: +1.252.752.9917
E-mail: dan@hascientific.com

European Support
H&A Scientific, Inc.
Mainzer Landstrasse 176
60327 Frankfurt am Main / German
Ph: +49(0)69.97358.261 Fax: +49(0)69.97358.101
E-mail: hainfo@hascientific.com

