



Justice Laboratory Software

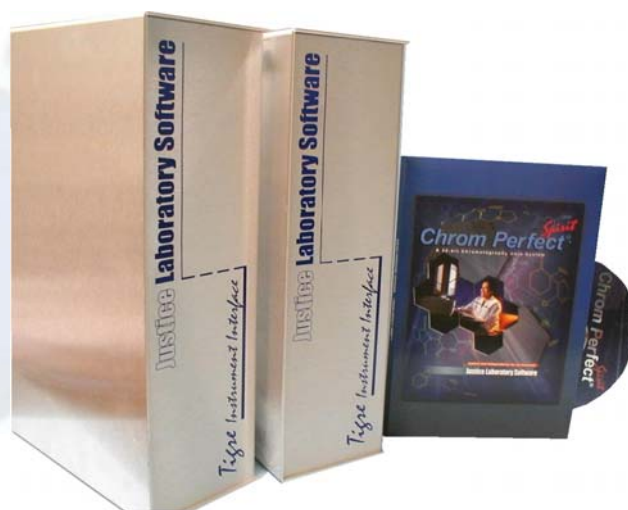
Chrom Perfect *Spirit*[®]

Multi-Instrument Chromatography Data System
Single User or Client/Server

Scientists world wide know the **Chrom Perfect**[®] brand represents the finest in chromatography data acquisition products. **Chrom Perfect Spirit**[®] is now the Flagship member of an expanding family of quality software and hardware offerings.

Chrom Perfect Spirit[®] is built on a solid foundation. Thirteen years of software development has transformed the original World Class **Chrom Perfect** CDS into the most feature rich solution available today for the multiple instrument laboratory. **Chrom Perfect Spirit**[®], V5 Series is the Perfect solution for small laboratories as well as laboratories with hundreds of users and instruments.

Chrom Perfect Spirit[®] is the only CDS that gives chromatographers complete freedom of choice when selecting hardware and software appropriate for the laboratory. Data acquisition and data acquisition/instrument control products are available to meet the needs of current and legacy instrumentation. Chemists experience a single user-friendly interface and all data are created in a common file format. This makes training and data transfer to the rest of the enterprise surprisingly simple.



Justice Laboratory Software also provides a wide variety of data acquisition and control solutions to fit the needs of today's laboratory.

Available Options

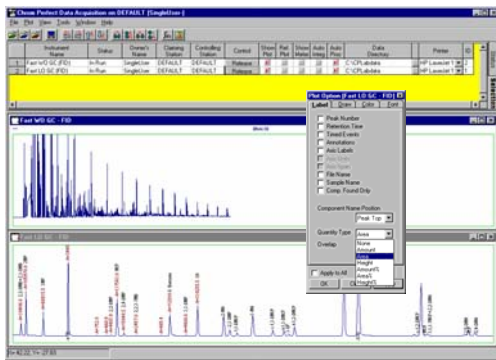
- Integrated LABS/Q Perfect LIMS
- Chrom Perfect SEC/GPC Viscosity
- Chrom Perfect SAS Autosampler for any GC or HPLC
- Chrom Perfect Analog-Out Software for Process Control
- Chrom Perfect Streamlines Multi-Port VICI Valve Control
- Chrom Perfect Instrumentation Set-point Control
- Chrom Perfect Simulated Distillation and Natural Gas Applications
- USB, Serial, and Network A/D Solutions

Data Acquisition

Real time integration gives users freedom to make decisions early in the run. Integrate automatically with a fixed time interval, or click any time to trigger integration. Save time, samples, and other resources.

Method fine tuning can occur while your data is being acquired. Noise and peak adjustments can be tested and saved as you are acquiring the data.

Unlimited downloadable user fields add key search and report criteria for a database.



Simply right-click on the real-time plot to access real-time features.

LABS/Q Perfect LIMS

Available Now! An integrated system to both acquire and manage your chromatographic data.

Justice Laboratory Software continues to provide easy interface tools so users have the freedom to select the LIMS of their choice. But for those who wish to have an integrated CDS/LIMS system we now offer an out-of-the-box CFR 21 Part 11 compliant solution.

LABS/Q Perfect LIMS—the **Perfect** choice!

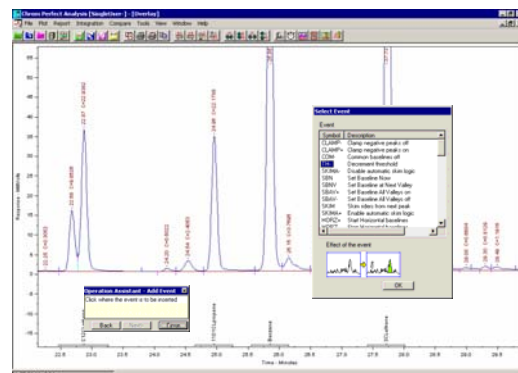
Intelligent Automation

- Intelligent Sample Introduction with our Sample Automation System Auto-sampler and Streamlines Multi-Port VICI valve control
- Intelligent Acquisition utilizes your network with TCP IP communication
- Intelligent Reporting with automatic pdf file creation and automatic email service
- Intelligent Process Control with results based output to PLC and relay devices.

Data Analysis

Users have freedom to choose how many chromatograms are displayed and analyzed at a time. Key chromatogram information is only one right click away.

Every chromatogram displayed in the analysis program can be individually adjusted for plotting, integration, and reporting. Programs such as **Rapid Review, Batch Processing, and Summary** allow users to review, reprocess, and report data from multiple files.



Operation Assistant helps users step by step in all interactive operations such as: manual integration, annotation, calibration parameter adjustments, etc.

Unique Client/Server Implementation

Our unique client/server software technology blends users and instruments across the enterprise. The acquisition *client* presents virtual instruments that provides users a common GUI for all instruments. The data acquisition *server* handles the different instrument hardware requirements behind the scene.

Instruments are securely "claimed" by users. Once claimed, only users with sufficient privileges can control the instrument.

Other users have freedom to view status and acquiring chromatograms remotely via DCOM. If a user decides to leave the acquisition running while absent, control can be locked so no one except system managers can access the instrument.

The client/server technology also provides a safe environment for busy networks. Once a sequence of data acquisition is downloaded to the server on the network, operation can continue to the end of the sequence.

Custom Reports

Chrom Perfect Spirit® is shipped with over fifty custom report templates. Select from a broad range of reports that cover all aspects of laboratory reporting from Certificates of Analysis to system validation. All are easily modified by users. The powerful features of **ReportWritePlus**™ and the Chrom Perfect Method program allows users to produce multiple reports from a single analysis. Satisfy the needs of QA, engineering, client, and the LIMS interface with a separate report for each.

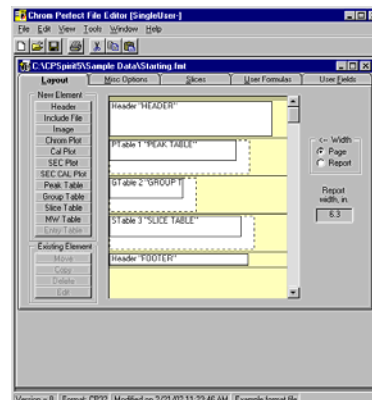
ReportWritePlus™

- Unlimited reporting capabilities
- Create pdf files for email or web viewing
- Output results to PLC devices or relays
- Easy data transfer of results
- Easy LIMS interface



Incredible Power and Flexibility

- Use the power and freedom of **Chrom Perfect Spirit**® for your lab
- The complete solution for any HPLC, GC, or CZE application
- Connects to any brand of HPLC/GC
- The greatest number of data acquisition choices available
- Automatic email, automatic pdf files
- Full custom calculations without the cost and complexity of embedded data bases
- Fastest, Easiest, Most Complete, Summaries and Reports
- Easy universal LIMS interface as well as integrated **LABS/Q Perfect** LIMS solution
- ISO certified developer



Graphically format your report without using special commands.

Choice of Thousands of Chemists Worldwide

The purchase of a Chromatography Data System, no matter how large or small, is considered an investment in the productivity of the laboratory. We recognize that this investment requires confidence in a company, its products, strategy, support, and management.

Justice Laboratory Software offers the most comprehensive line of high technology software products for your Laboratory. Whether you require an XP/2000/NT based client/server chromatography system or a single user basic system, Justice Laboratory Software meets the demanding needs of chromatography applications. Our products offer multi-vendor instrument interfacing and distributed data processing for complete data integration of your lab.

Chrom Perfect Spirit® data systems do not require proprietary hardware data acquisition servers and are compliant with all Microsoft 32 bit ActiveX, COM/DCOM, and COM+ standards.

PC Requirements

Operating System	Windows 2000, Windows XP Pro
Processor	Pentium IV and higher @ all clock speeds
RAM	256—512 MB
CD-ROM/DVD	32X or higher plus a CD-RW for backup
Video Accelerator	4X AGP or PCI or higher
Monitor	17" FST 0.28mm dot pitch
Floppy	1.44MB 3.5"
Ports	At least one Serial, Parallel, and USB (1.1 or 2.0 compliant), Mouse & Keyboard

Justice Laboratory Software invites you to compare **Chrom Perfect Spirit**® to any data system at any cost and find out about our dedication to customer service and support. Review our consistent record providing our customers with a significant revision **every year since 1989**.

The leading independent ISO certified developer of Chromatography Data Systems.

Ordering Information

40-0000-0000 **Chrom Perfect Spirit**® V5 Series Software Suite Includes : one **Spirit**® User license.
*Data acquisition requires selection of one or more of the appropriate A/Ds or instrument interface solution below:**

40-5000-7102	Type II	two channel RS232 24 Bit A/D converter
40-5000-7202	Type III	two channel USB 24 Bit A/D converter
40-5000-7404	Type IV	four channel USB 24 Bit A/D converter
40-5100-7202	Type E+	two channel TCP/IP A/D converter

* Contact **Justice Laboratory Software** for information on the many direct instrument interface options.



Chrom Perfect Spirit® and **Chrom Perfect**® are registered trademarks of Justice Innovations Inc. Windows Me, Windows NT, Windows 98, Windows 2000, Windows XP are registered trademarks of Microsoft Corporation. Pentium III and IV are registered trademarks of Intel Corporation.

Justice Laboratory Software

A Division of Justice Innovations, Inc.

US
TEL (973) 586 8551
www.justiceinnovations.com

EUROPE
TEL +44 (0) 1337 828404
www.justiceuk.com

Detailed List of Features

Chrom Perfect Spirit[®]

Operating System Support

Windows 2000
Windows XP Pro

ISO 9000 Certified, FCC, CE approved

General

Country of Origin: USA
Shipping date of first revision of product: 1989
Manual Hard copy : Yes
Manual as help file: Yes
Max Number of instruments/per/workstation: 16
Max Number of detector channels/workstation: 16
Max Number of users: unlimited
Number of Active X objects available to user: 34
Instrument interface protocols supported: RS232, TCP/IP, USB, ISA

Implemented Technologies

Client/Server
COM/DCOM
Active X

GLP/ 21 CFR Part 11 Implementation Tools

Enable Logon and Password
Password Time out
Enforce system wide event logging
Define all page set ups
Serializes printed reports
Support of group rights
Memberships
Password selectable rights
User specific directory paths
Station Level Logging flags
View Data error alarm log files
Change Station Specific hardware
Claim control instruments
Download instruments
Change run Times
Operate relays manually
Write Cal Files
Write Method Files
Write Raw files
Write Report Format Files
Write instrument Control files
Write Sequence Files
Write SEC files
Allow manual integration
Modify Raw data settings
Modify Calibration settings
Modify Method Settings
Import Data
Export Data

Print Reports
Dismiss alarms
Create artificial Raw Files
Unique user profiles for each user
Enforce change control

Data Acquisition

24 Bit external interface interfaces
Delta-Sigma High Speed
Linearity 0.002% of full scale
Input range +/- 0 to 1 Volts and Custom Ranges
Sample rate dependant on A/D choice
Number of channels dependent on the number and types of A/Ds selected
8 TTL outputs in each A/D device
Run starts with hardware or software initiation
Multi-national power supply
28 integration timed events
Any number of user programs enabled before, during, or after data acquisition,
Tigre II - 2 channel one time base RS232
Tigre III - 2 channel one/two time base USB
Tigre IV - 4 channel one thru four time base USB
Tigre E+ - 2 channel one/two time base TCP/IP
Direct instrument acquisition and control via TCP/IP

Calibration Routines

1000 Named components with up to 60 levels
Fit types: Point to Point, linear, quad, cubic, power, avg cal factor
Fit weight: Equal, Inv X, Inv sq X, Inv Y, Inv sq Y
Origin treatment: force, ignore, extrapolate
Internal, external standard, calculations
Statistics include: Coefficient of determination, avg cal factor, average error, percent RSD
Group calibrations and unlimited reference peaks

Peak Integration Features

Automatic Integration
Peak Width
Threshold
Area Reject
injection Volume
Sample weight
Dilution Factor
Internal Standard Amount

Manual Integration

Move Peak Start/End
Add peak
Delete Peak
Split Peak
Fuse Peak
Merge /Break Baseline
Move SEC Baseline Start end

Insert Events from interactive list

Auto correction On/Off

Clamp Negative Peaks on
Clamp Negative Peaks off
Force Common baselines on
Force Common baselines off
Increment Threshold
Decrement Threshold
Enable automatic skim logic
Disable automatic skim logic
Double peak width
Half, peak width
Force Common Base lines
Invert Negative Peaks On
Invert Negative Peaks Off
Measure and update threshold
Negative Peak detection on
Negative Peak detection off
10 Groups of Peak selection
8 TTL events as necessary
Retention time labeling on/off
Set Base line all Valleys on/off
Set Base line next Valley
Set Baseline Now
Show Data as Points
Show Peak Tic Marks
Skim Riders from Next peak
Split Peak
Start and end Horizontal Base line
Start and Stop Peak Sum Window
Start and Stop Peak Integration
Menu or mouse drag and drop
Event Deletion
Interactive Timed-Event placement

Batch Reprocessing

From Sequence or list
Allows Automatic Smoothing
Allows Automatic Baseline subtraction
Allows Automatic Bound files
Allows Automatic ASCII files
Allows Automatic Reports
Allows Auto AIA CDF / Net CDF
Allows Auto Z file for LIMS
Allows Auto Append report
Allows Automatic Cal updates
Allows Automatic Cal reports
Allows User programs

Send Reports to File

Printer Screen All
as ANDI, AIA, CDF, and Net Cdf
ASCII, selectable format, CSV
Single line Tab or comma delimited
Concatenated files

Windows emf (enhanced meta file)
PDF files
CP Raw and or Bound™ files

Rapid Review of reports without printing

View all Chromatograms
View all Reports

Summary of Multiple analysis up to 1000 runs

Amounts
Amount %
Area
Area %
Ret. Time
Height
Height %
Response Ratio
Summary File list can come from:
Lists
Previous List
Sequence
Calibration File
Components to Summarize from:
Largest
Selected peak totals
Group Totals
Summary Styles
Tables=Components
Tables=Multiple Components
Table= Items
Component names in headers

Real time Status Displays, selectable

Instrument
Controlling Station
Detector
Status
Sample
Raw File
Method file
Cal, file
Run Time
Response
Sequence
Sequence Number
Vial Number
Relay Position
Reference Chromatogram
Automatic Name
Real time Integration

And Much More.....

Compare this list of features to any other Chromatography Data System and "Demand Justice"