KNAUER

Software
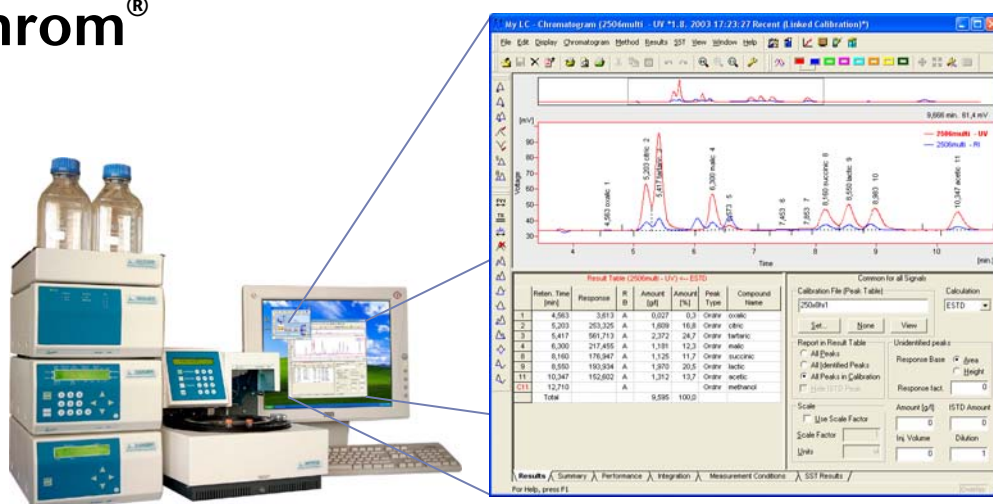## ▶ ClarityChrom®

A clear solution for the chromatography lab…

KNAUER ClarityChrom® is a powerful, yet easy-to-use chromatography software for instrument control, data acquisition and data processing. ClarityChrom® is designed for smaller laboratories. It is an economical solution compared to other more complex chromatography software while still offering FDA 21 CFR Part 11 compliance. The software runs under Windows 2000 Professional, XP, or Vista in any localization.

ClarityChrom® comes in two flavors:

as an analytical chromatography software solution

- with complete LC control and autosampler control package
- support for a wide range of instruments
- scalable from 1 to 4 LC systems (instruments), each with up to 12 detectors (channels)
- optional extensions, e.g. for PDA data handling, GPC analysis, and GC control

as a fully developed preparative chromatography software solution, **ClarityChrom® Prep**

- for automated LC purification tasks
- includes all of the features of the analytical version of ClarityChrom®
- allows for peak recognition by level, slope, or level and/or slope
  (for details on ClarityChrom® Prep, please refer to page 4)
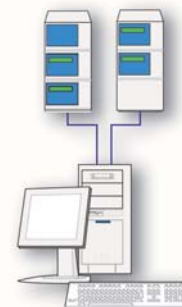
Features of ClarityChrom® and ClarityChrom® Prep

Unlike other Clarity* based chromatography packages, a standard single instrument license for **KNAUER ClarityChrom® comes complete with the options for LC control and autosampler control**. Additional licenses are available for offline data evaluation, for controlling additional instruments (LC, GC), for processing data from photodiode array (PDA) detectors, for gel permeation chromatography (GPC), as well as for a system suitability test option (SST).

* Clarity is a trademark of DataApex, Czech Republic
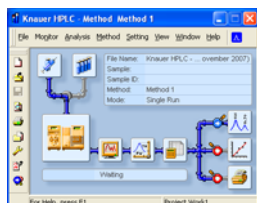
ClarityChrom® chromatography software

Supported instruments include all KNAUER pumps, detectors, valve drives, auto injection systems, column thermostats beginning with the WellChrom series up to the latest Smartline instruments. ClarityChrom® can also control many more instruments from different manufacturers.

Refer to **www.knauer.net/claritychrom/instruments** for an updated list.

Data acquisition can also be performed with any detector providing a voltage output by simply connecting it to KNAUER IF2 or Smartline Manager 5000 A/D converter. ClarityChrom® allows to send a "Next Injection" command via short circuit to autosamplers which are not supported via serial or LAN control.

Programming is very flexible, e.g. allowing an auxiliary pump and switching valves to be applied for automatic procedures such as injection on column, wash steps or solid phase extraction (SPE).
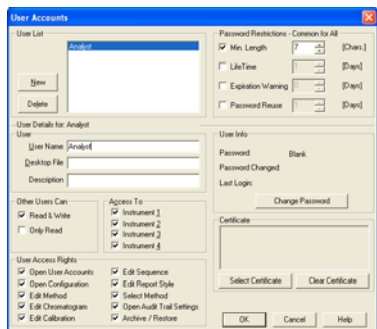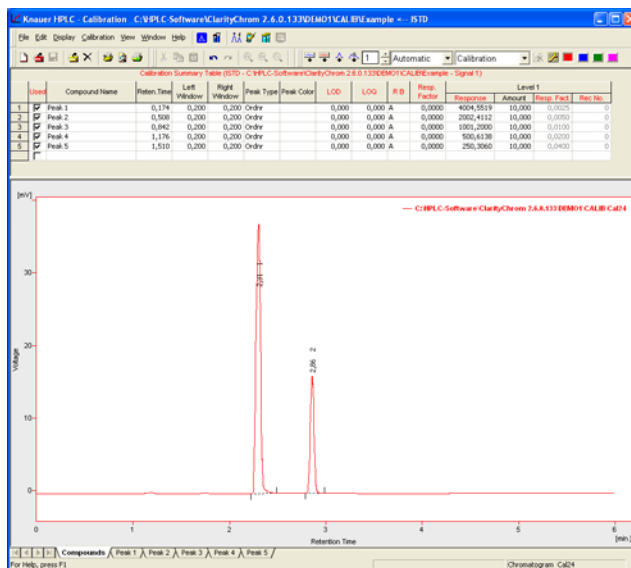
Intuitive operation: From the method window all major program modules are just a mouse-click away. You can easily access method setup, injections (single and sequences), call the device monitor, the data acquisition window, or the chromatogram view. Edit integration and calculation values, calibrate your data, as well as edit the report setup by clicking the easy-to-remember icons.

Calibration can be as easy as this: All required graphics, tables and tools in one window – clearly arranged.

Login window for managing up to four chromatography systems.

System and user administration can be carried out easily: Just enter the user name, give a password and assign the user access rights by checking or un-checking the boxes – and it's done.

Other key features of ClarityChrom® and ClarityChrom® *Prep* include:

21 CFR Part11 (GLP):	Password protection, Password expiration, Electronic signature, AuditTrails, User account with access rights
Integration:	27 integration parameters (peak width, threshold, tangent slope ratio etc.) integration parameters programmable in time, automatic re-integration
Calculation types:	Both without and with calibration (internal and external standard method), parameters of individual peaks for assessing efficiency of the column and the complete chromatographic system, the SST module allows for calculation of deviations and reproducibility for selected parameters
Calibration:	6 types of calibration curves, up to 20 levels, reference peaks, groups, unlimited number of standards (peaks), LOD, LOQ
Chromatogram operations:	Overlay view, custom labels and settings, and also applying mathematical operations to chromatograms
Automation:	Sequences, automatic launch of selected commands or applications immediately following chromatogram acquisition – Post run, Batch
Presentation of results:	Integrated customizable table of results, columns with user-defined calculation, summary table, and export in text or database format
Calculations:	Custom: 12 predefined mathematical operators, 15 basic and 4 summary functions, special: Kovats indexes for GC, determination of noise/drift, performance calculations
Reports:	Custom protocols, print preview option, printing to PDF file
Data export:	ASCII, AIA, dBase
Data import:	ASCII, AIA, CSW17, CSW32
Multi-user environment:	Selectable system of user accounts with independently customizable behavior and appearance for individual users
Network environment:	Easy offline data sharing (at the file level) among all stations in a local network

Additional Software Options/Extensions:

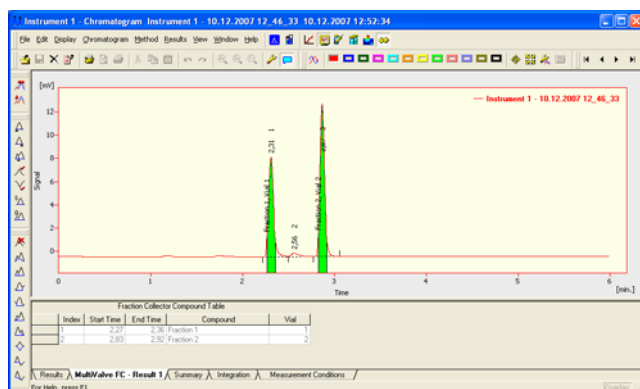|	
PDA Option	allows ClarityChrom® to acquire and process 3D data from a photo diode array detector (KNAUER PDA detectors are fully supported). The PDA extension provides peak purity analysis and peak identification by spectral library search.
GPC/SEC Option	provides interactive and automated gel permeation chromatography analysis, including re-calibration and GPC reporting, as well as simplifies the retrieval of GPC data. The GPC extension allows flow rate and multi-detector delay corrections and includes "Narrow", "Broad" and "Broad on Narrow" calibrations.
System Suitability Test	The SST extension automates the calculation of system suitability parameters for system validation and calculates up to 12 parameters and compares the results with the limits the user has set.

Technical data are subject to change without notice

ClarityChrom® chromatography software

ClarityChrom® *Prep*

The **preparative version of ClarityChrom®** includes all features of the analytical version and adds the functionality for automated HPLC purification tasks. Many other software packages in this field are either very expensive or lack some important features, such as a graphical editor for intuitive fraction collection programming, a graphical presentation of the fraction collector (FRC) rack with time and volume info on the respective fraction.
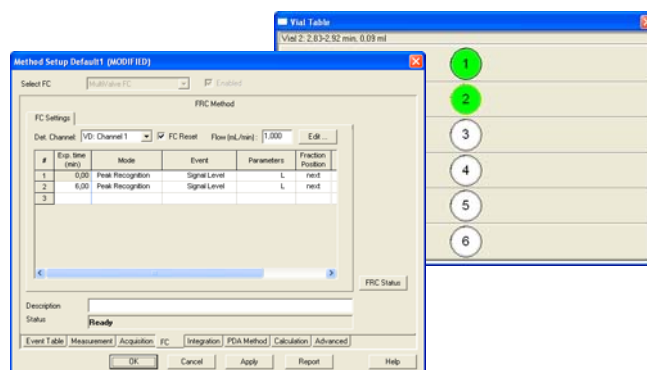
ClarityChrom® *Prep* is KNAUER's cost-effective, yet feature-rich preparative HPLC software

solution, which supports all this - and more - e.g. control of a feed pump and control for fraction collectors from Büchi, ISCO, and KNAUER. Peak recognition can be triggered by either "level", "slope", or "level and/or slope" separately for peak begin and peak end. Solvent recycling can be carried out within the peak recognition interval. In addition, the fraction collector can be controlled manually and switched to "collect", "waste" or "solvent recycling" position during a run. For timed events the user can define the respective vial positions.

The FRC rack will be displayed in a separate rack/vial table window, which adapts to the rack type used. Pointing with the mouse on a fraction vial will display the corresponding collection time and volume.

Ordering Information

Order No.	ClarityChrom®, analytical version
A1670	Single instrument license for LC, one time base, incl. autosampler control (AS)
A1671	Additional instrument license for LC, one additional time base
A1674	Offline license for data evaluation

Order No.	ClarityChrom® *Prep*, preparative version
A1685	Single instrument license for LC, one time base, incl. fraction collector control, feed pump control
A1686	Additional instrument license for preparative LC, one additional time base
A1688	Offline license for data evaluation

Order No.	ClarityChrom® Options
A1676	PDA license for photo diode array data processing
A1677	SST license, system suitability test for system validation
A1678	GPC license for gel permeation chromatography data processing
A1680	GC license for gas chromatography data processing

Visit www.knauer.net for details on complete HPLC systems, HPLC columns, and osmometers

Your local distributor