PerkinElmer Autosystem and Autosystem XL GC Control Software for EZChrom *Elite*™ CDS and Agilent OL Operating System for the Laboratory

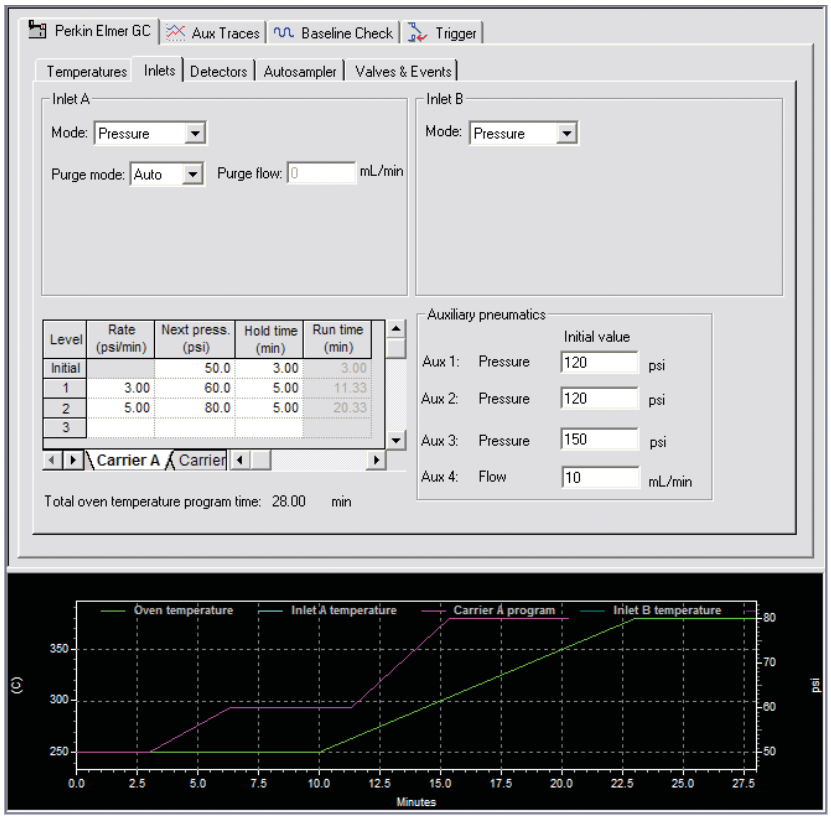

Figure 1. EZChrom Elite's instrument control for the PerkinElmer GCs includes convenient graphic displays of instrument settings including temperature and pressure gradients. Full control of the PerkinElmer Autosystem and Autosystem XL GCs is provided.

Control the PerkinElmer Autosystem and Autosystem XL GCs with EZChrom *Elite* and Agilent OL

Gas chromatographs from PerkinElmer are in widespread use throughout the world. Comprehensive instrument control software to control the popular PE Autosystem GC and Autosystem XL GC is available for the EZChrom *Elite* Chromatography Data System and Agilent OL Operating System for the Laboratory. These PerkinElmer GC control software options can be added to EZChrom *Elite* or Agilent OL to provide integrated instrument control of the particular GC along with a rich set of data handling and presentation capabilities.

Specifications

EZChrom *Elite* controls the following PerkinElmer Autosystem and Autosystem XL GC parameters (subject to the capability in the hardware model):

- Perform data acquisition, processing, and reporting with a few mouse clicks using a simplified user interface.
- Complete control of temperature settings, including column oven (equilibration times), inlet set points, detector set points, and cryogenic unit set-in temperature.
- Inlet support for the Autosystem packed column, capillary and gas sampling valve and Autosystem XL programmable on column - inlet program, oven tracking, programmable split/splitless-inlet program, and split/splitless oven-tracking modes.
- Complete control of autosamplers for the PerkinElmer Autosystem / Autosystem XL GCs.
- Control of optional PPC (programmable pressure/flow controller unit).
- Controlled via RS-232.

Agilent Technologies

In addition to full instrument control of these PerkinElmer GCs, EZChrom *Elite* and Agilent OL can control a wide variety of other GCs from leading instrument manufacturers. EZChrom and Agilent OL can also control GCs from Agilent, Thermo Electron, Varian, Shimadzu and others.

Control All GCs Through the Same Software Interface

In controlling the PerkinElmer Autosystem and Autosystem XL GCs, EZChrom *Elite* simplifies operation by providing the same software interface for all instruments. Users can create software methods for each kind of GC, using the same software displays and parameter entries to minimize learning time.

The software provides control for the GC autosampler, auxiliary temperature control zone, cryogenics cooling unit, PPC (programmable pressure/flow controller unit), and PPC error alarms. All inlet types for the Autosystem (none, packed column capillary, gas sampling valve) and the Autosystem XL (programmable on-column-inlet program mode, programmable on-column-oven tracking mode, programmable Split/Splitless – inlet program mode, and programmable Split/Splitless – oven tracking mode) are supported in the software selections. Control parameters for the primary PPC controller or secondary PPC controller, if installed on the actual GC, are also available.

Simple to use tab pages are provided in the EZChrom software to allow the user to quickly and easily specify instrument settings for Inlets, Detectors, and GC valve positions.

Powerful Graphic Displays

The graphic display not only plots the chromatogram, but can also overlay the GC oven temperature program, inlet A temperature program, inlet B temperature program, carrier A time program and carrier B time program. See Figure 1. These graphic displays make it easy to view the established settings visually for every method.

A unique software "dashboard" for the PerkinElmer GC (see Figure 2) conveniently displays the instrument and status values of the current system, including the temperature values of all monitoring zones in the GC, detectors, autosampler and PPC unit. If desired the user can also access individual parameter settings for the desired component from the dashboard to make easy changes as well.

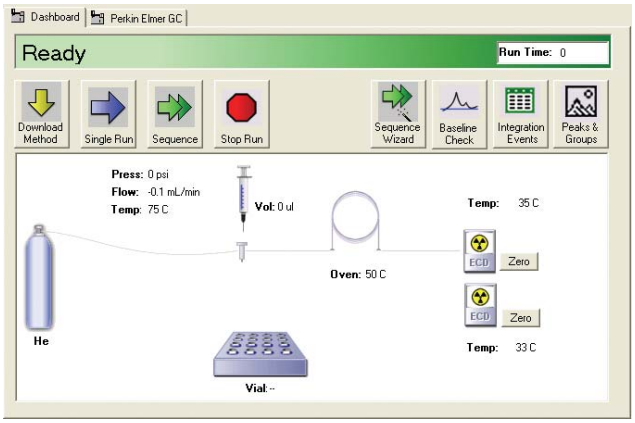

Figure 2. EZChrom provides special graphic displays to make instrument control and communications quick and easy. The unique software "dashboard" provides a graphic depiction of the actual Autosystem or Autosystem XL GC with current status of conditions. Each graphic module is in turn "active" so that users can use the mouse to click on the module and in turn access specific settings for the PPC unit, autosampler, oven, and detectors.

Instrument Method Upload

If desired, the software provides an easy option to "upload" the current instrument method settings directly to the EZChrom software method. Depending on the work practices used in the laboratory, this can be a significantly easier way to work with an established instrument setting to create/modify a software method.

Autosampler Control is Simple and Sophisticated

If an autosampler is used on the PE GC, then software controls are provided to specify the injection site (front or rear), injection speed (normal, on column, fast), pre-injection sample washes, sample pumps, viscosity delay, pre-injection solvent washes, post-injection solvent washes, and wash/waste vial.

Use Powerful EZChrom Features for Data Analysis

EZChrom *Elite*'s powerful graphical routines make it easy to view all results. Compare and overlay multiple runs for quick review of data. Re-analyze an injection using different reporting and data processing conditions. Subject multiple runs to a variety of different reporting options. Interface EZChrom results with other software applications for extended calculations for BTU analysis, simulated distillation, and more. See Figure 3.

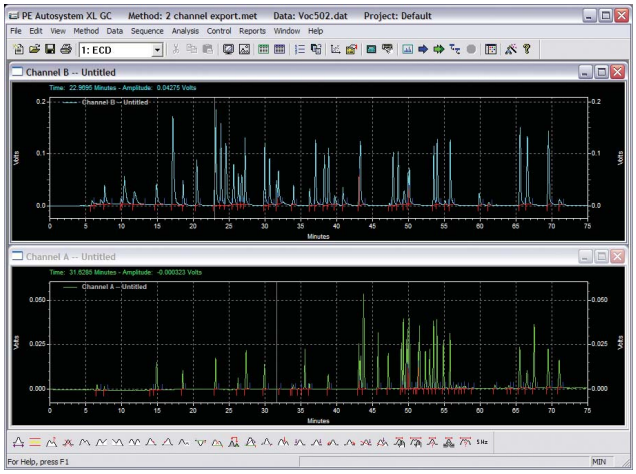

Figure 3. EZChrom's built-in software features are ideally suited for handling a wide range of GC data. With powerful data displays, automated baseline treatments, flexible routines for peak groups and reporting, even involved GC data can be quickly and easily handled by the software.

Take advantage of EZChrom *Elite*'s unprecedented multi-vendor instrument control and have it control over 300 different instruments and modules from over 25 different GC and LC manufacturers. Instrumentation from different vendors such as Agilent, Waters, Shimadzu, Thermo Electron, Varian, and Waters are available.

Fully Protected Data Acquisition and Control

The unique data acquisition and instrument control architecture in EZChrom and Agilent OL make it possible to perform data collection even in the event the host computer network is down. The special Agilent Instrument Controller acts as a network appliance and can take control of each PerkinElmer Autosystem or Autosystem XL GC. The Agilent Instrument Controller can run injections, collect and protect the data completely. If the network is down, these injections will be securely stored in special flash RAM in each Agilent Instrument Controller.

Visit **www.agilent.com/chem/scisw**
or call toll free **1-800-227-9770**
(U.S. and Canada).

In other countries, please call your local Agilent Technologies analytical sales office or Authorized Agilent Technologies Distributor.

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The data storage in each Agilent Instrument Controller allows multiple injections from entire sequences (including injections based on different methods) to be safely stored and protected so your instrument runs can continue under serious network problems.

Up to four (4) PerkinElmer Autosystem or Autosystem XL GCs can be connected to a single Agilent Instrument Controller (RS232 version).

Manage All Instrument Data with Agilent OL

The unique Agilent OL Operating System for the Laboratory provides powerful content management of all raw data and results from the PerkinElmer Autosystem or Autosystem XL GC systems. "Smart" electronic filters specific for the PE Autosystem or Autosystem XL GC results are used to extract key metadata from each GC run and store that information in a database. All results are automatically deposited in a safe, secure repository and made fully searchable using Agilent OL's powerful searching facilities.

Users can readily find their data based on queries that not only specify criteria such as instrument, username and Sample ID, but even extend to detailed results such as component names and concentration ranges.

Agilent OL manages all the electronic information in the laboratory. In addition to all PerkinElmer GC raw data and results, Agilent OL can manage Microsoft Office files, e-mails, Adobe pdf files, chromatography data from EZChrom *Elite* and other CDS packages, Mass Spec files, and much more. No other package offers this powerful capability to handle all electronic information and documents generated in the laboratory. Conduct quick, focused searches across all your data to find hits from various PerkinElmer Autosystem or Autosystem XL GC results, as well as Excel spreadsheets, Word documents, pdf reports, and more.

Furthermore, Agilent OL's management of the information makes it easier and safer to collaborate and share results with others with its powerful "check-in/check out" capabilities and Electronic signoff capabilities.

Hardware Requirements

The following minimum ROM version are required on the PerkinElmer Autosystem and Autosystem XL GCs:

PE Autosystem	R 1-8
PE Autosystem XL	R 3.300

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