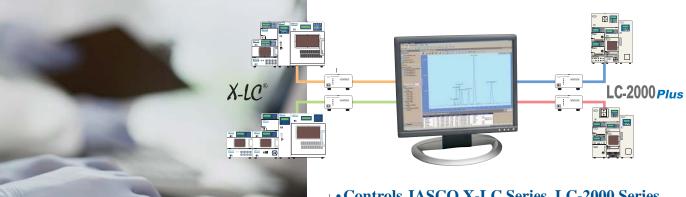


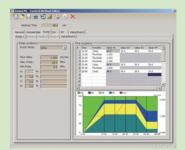
Chromatography Data System



- Controls JASCO X-LC Series, LC-2000 Series, LC-1500 Series, and more
 - Controls up to four systems simultaneously
 - Acquires data at a sampling rate of 100 Hz and is compatible with X-LC detectors.
 - ChromNAV CFR is available for 21 CFR Part 11 compliance.

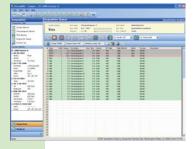
System Control and Data Acquisition

ChromNAV can control up to four systems simultaneously. LC-NetII/ADC is used as the hardware interface between the PC and the system. Up to four channels of analog data can be acquired by each LC-NetII/ADC.



Control Method Editor

Graphical display of changes in the solvent composition and flow rate by the pump time program makes the gradient conditions easier to visualize, greatly facilitating method development.



Acquisition Sequence

The Acquisition Sequence function allows the user to create the calibration curve and perform quantitative calculations automatically while also supporting batch processing of the data acquisition.

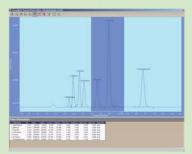


System Monitoring

The system monitoring window enables the user to view setting parameters of each module and the system status in real time.

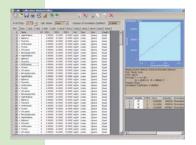
Powerful Data Analysis Functions

ChromNAV includes all standard chromatography calculations, such as reliable peak integration and identification, powerful and easy quantification, quick user-defined reporting format, versatile data conversion for data export. Peak calculation results can be sent to MS Excel automatically.



Easy Manual Peak Processing

In addition to the powerful capabilities of the automatic peak processing, easy baseline manipulation facilitates manual peak processing.



Multiple Calibration Curves

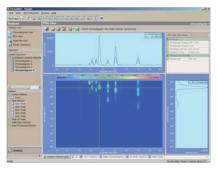
For a specific component, a single calibration curve can be created with the data of the preferred channel or multiple calibration curves can be created with data from different channels.



Multiple Chromatogram Display Modes

The multiple chromatogram display modes make it easy to visually compare chromatograms from different detectors or different acquisition tasks.

PDA detector control and data analysis





PDA Data Analysis

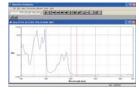
PDA data analysis is a standard feature of ChromNAV. Some useful tools for manipulating spectra, such as peak purity calculation, spectrum search, etc., are fully supported. Installed as part of the ChromNAV software package, JASCO Spectra Manager is provided to perform advanced spectral analysis.

Peak Purity Check

ChromNAV calculates peak purity by comparing the spectrum within the peak. The purity distribution map for each peak is available and can be displayed graphically.

On-flow spectra by the Spectra Manager

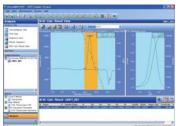




A powerful cross-platform software package, Spectra Manager is standard for on-the-fly spectral scanning by UV, 4 ch-UV, FP and CD detectors and data processing functions.

Optional GPC add-on





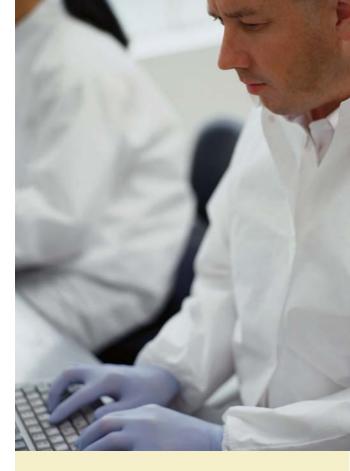
The optional GPC package allows molecular weight distribution calculations. Molecular weight distribution is displayed together with calculation results and the chromatogram.

Automatic system diagnostics





The ChromNAV automatically diagnoses the systems. Diagnostic results are saved together with measured chromatograms.



ChromNAV CFR

Users and Privileges

User privileges set by different security levels.





Electronic signature

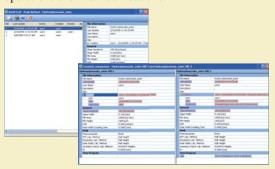
Three types of electronic signatures (Created, Reviewed, and Approved) are available. Customer cannot modify any Approved data and methods.





Audit trail

Audit trail function records and archives all operations and file modifications.



Specifications. •

	ChromNAV	ChromNAV/CFR
PC Requirements	Operating system: Microsoft Windows XP Professional SP2 or Vista-Business CPU: Pentium4 2.8GHz or faster RAM memory: 512MB or more recommended *1 HDD: 80GB or more free space Monitor: SXGA 1280 x 1024 or higher recommended	
	Others: CD-ROM drive*2, Microsoft Word & Excel 2007 or 2003.	
Controllable HPLC Units	X-LC series, LC-2000 series, LC-1500 series, LC-900 series (except CO-960/965/966 and RI-930), Micro21 series.	
HPLC Systems	Up to 4 systems can be controlled simultaneously *3	
Unit control	Initial conditions and time program control	
Spectrum scan	Direct scan and time program scan*4	
Direct control	Direct control available for each HPLC unit*5	
Analog inputs	Up to 4 channels for each LCNetII /ADC	
Analog data sampling	10 to 4000 msec (9 steps) *6	
PDA acquisition	PDA data acquisition: Up to 8 virtual channels available for chromatograms extracted from PDA data.	
PDA data sampling	Time interval: 0.1 to 3.2 sec (6 steps) *7, wavelength interval: 6 steps*8	
Time program	Maximum is 999.9 min.	
Time program interval	Minimum is 0.05 min.	
Unit diagnosis	3 warning levels are available. Diagnosis result will be linked to chromatogram data.	
Chromatogram analysis	Peak processing: automatic processing by method program, preview of the peak processing test result, manual peak processing Pharmacopoeia method: USP/JP/EP Identification method: absolute/relative/shift relative. Automatic identification for multiple channels is supported. Preview of the peak processing test result by reference chromatogram	
	Quantitative calculation: external standard/internal standard/normalization	
	Calibration curve: linear/quadratic	
PDA data analysis	Peak purity calculation, spectrum library and spectrum search.	
Spectrum Analysis	JASCO standard spectra analysis software package Spectra Manager	
Data Converter	Import: JASCO Borwin, Borwin/PDA, LCSS-905, 807-IT, ASCII Y, ASCII X/Y, AIA(Andi) Export: ASCII Y, ASCII X/Y, AIA(Andi)	
Electronic Signature	_	\circ
Audit Trail	_	0
Data Security	_	0
System Control I/F	LCNetII/ADC	
PDA Detector I/F	PDA detector connection kit	
Analog Signal Cable	2 cables are supplied, for LCNetII/ADC	

- *1: 2GB or more is necessary for Vista.
- *2: CD-ROM drive is necessary when installing ChromNAV
- *3: LC Net II/ADC is required for each HPLC systems. Only one PDA detector can be controlled by one PC. Switching HUB is necessary when using more than 2 sets of LCNetII/ADCs.
- *4: UV/VIS, 4WL UV/VIS and FP detector support on-flow and stopped-flow spectrum scan, while LCCD detector supports stopped-flow spectrum scan.
- *5: Direct control is locked during the execution of time program.
- *6: Data acquisition time will be less than 999.9 min if the time interval is small.
- *7: Small values may limit the wavelength interval.
- *8: Small values may limit the time interval.



• Specifications are subject to change without notice.

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