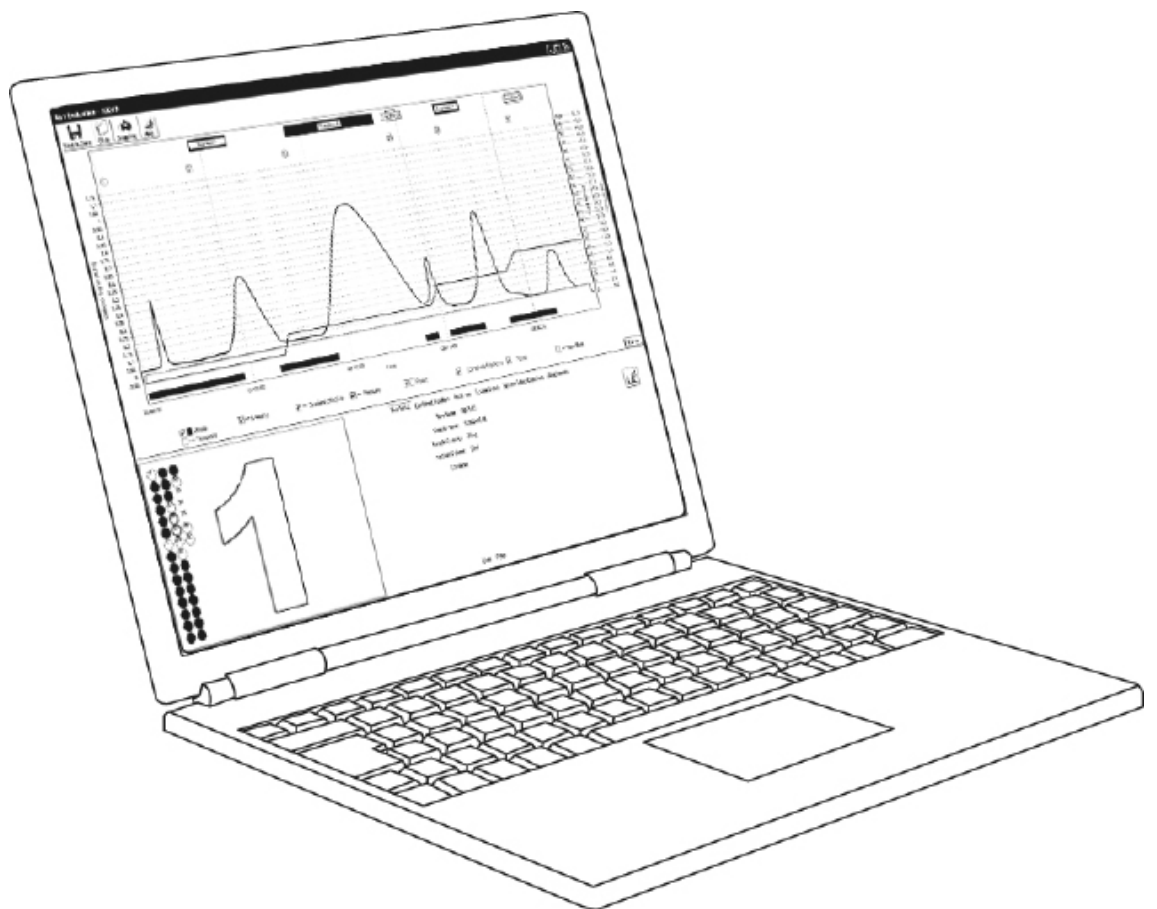# SepacoreControl
Software data sheet

The software is able to control the Sepacore® flash X10 and X50 chromatography system. Designed and developed with and for laboratories, the software is intuitive, easy to use and guarantees a safe and reliable operation in any separation step.

Scope of delivery

Components	Qty
Control Unit C-620	1
SepacoreControl Software DVD	1
Pressure sensor with mixing chamber	1
Extension cable PS C-601	1
USB cable	1
RS232 cable	1

System requirements

The PC must fulfill the following requirements:

Operating System	Windows 7 Professional/Ultimate/Enterprise (32-bit, 64-bit), SP1), Windows 8.1 Pro (64-bit) and Windows 10 (64-bit)
Central Processing Unit	Intel Core i3 or higher, 1.4 GHz or faster
RAM	3 GB RAM or more
Harddisk	>5 GB of free hard disk space
Display resolution	1280 × 1024 (minimum 1024 × 768)
Interface	USB 1.1 or higher
Others	DVD-ROM drive

Order code

0	5	4	1	1	0		SepacoreControl Package (includes C-620 control unit)
1	1	0	5	8	0	6	4	SepacoreControl update set
1	1	0	5	8	2	9	0	Upgrade from SepacoreRecord to SepacoreControl

Dimensions and weight

	Dimensions (W × H × D)	Weight
Control Unit C-620	465 × 110 × 118 mm	2.8 kg

Hardware requirements

Control Unit C-620

Power consumption	max. 30 W
Connection voltage	100 – 240 V ± 10 %
Fuse	T 8A L 250 V
Frequency	50/60 Hz
Installation category	II
Degree of protection	IP20
Pollution degree	2
Minimum system configuration	1 Pump C-601 or C-605 Fraction collector C-660 Detector (C-640, C-650 or other through Analog input 1V)

Firmware version

Pump Module C-601/5	3.0 and 3.4
Fraction Collector C-660	1.12
UV Monitor C-630	3.1 or higher*
UV Photometer C-635	3.1 or higher*
UV-Vis Detector C-640	2.29

*Updates are available via the BUCHI Service

Environmental conditions
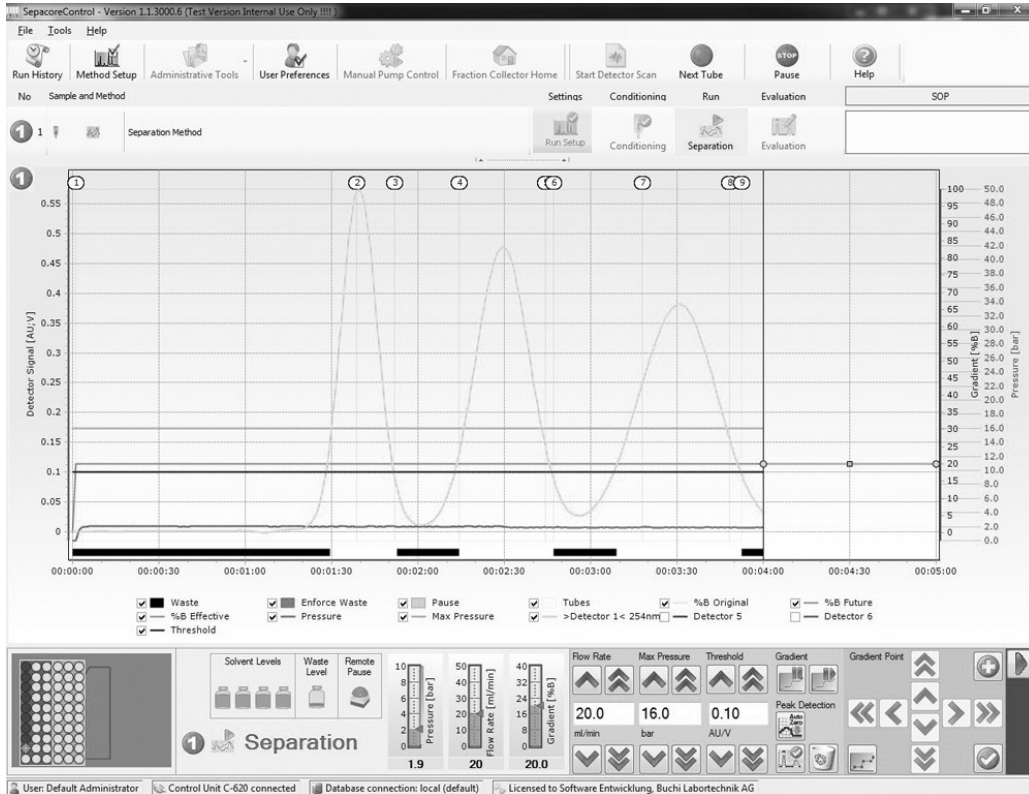
Temperature	5 – 40 °C for indoor use only
Altitude	up to 2000 m
Humidity	maximum relative humidity 80 % for temperature up to 31 °C, decreasing linearly to 50 % relative humidty at 40 °C

Languages

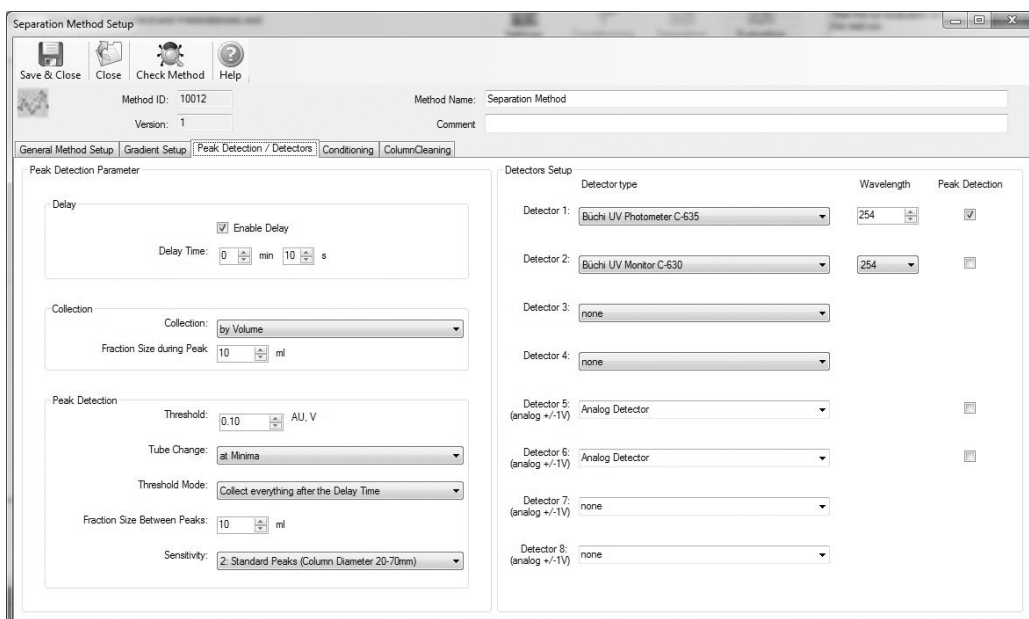|	
SepacoreControl software	en / de / fr

Functional principle

All parameters of a chromatographic run will be recorded automatically in a database. Multiple user definable features, such as peak tracking, the ability to combine fractions, add comments and create reports. The SepacoreControl allows the configuration of personal flow charts and report schemes. The SepacoreControl database can be installed at a local PC (standard installation) or at an external server (network installation).

Main functions

Multichannel peak detection
Determines the detector or channel used for peak detections. Multiple choices are possible. You can use max. 8 detector channels at the same time for peak detections.

Binary gradients / 4 solvents

Using the solvent valve it is possible to select up to two solvents per pump.

Change parameters on the fly

Most separation parameters can be adjusted during the run: flow rate, gradient composition, maximum pressure, threshold value for peak detection. It is also possible to deactivate / activate peak detection or to manually switch the fraction collector valve to waste.

Manual pump control

The pumps of the Sepacore system can be controlled manually without programming a method. This helps to condition the system before a run e.g. by removing air or for fast solvent exchanges.
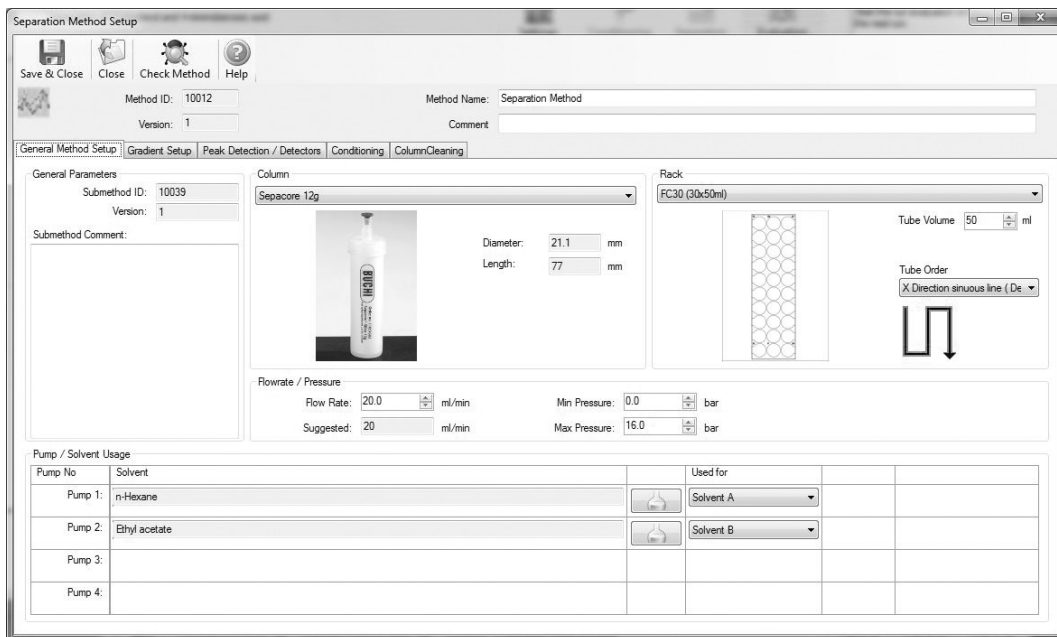
Method management

SepacoreControl allows simple method programming and management.

Steps to configure a typical method are:

· Column conditioning
· Separation
· Column cleaning
· Purge

The purge step allows an automated solvent exchange within all the tubing e.g. when needed for changes from normal phase to reversed phase runs.

Column management

A database of column specifications, suggested flow rates and maximum pressure ratings for the wide range of BUCHI cartridges and columns. Other cartridges or columns can easily be added to the database.

Solvent management

A database of common chromatographic solvents and their parameters such as boiling point, UV limitations and abbreviations. Easily expandable with new solvents and solvent mixtures.

	SolventName	Abbreviation	Formula	Boilingpoint	UV Limit
▶	1,2-Dichloroethane	EDC	C2H4Cl2	84 (183)	245
	Acetone		CH3COCH3	56 (133)	330
	Acetonitrile		CH3CN	82 (180)	200
	Benzene		C6H6	80 (176)	285
	Chloroform		CHCl3	62 (144)	245
	Cyclohexane		C6H12	81 (178)	210
	Dichloromethane	DCM	CH2Cl2	40 (104)	245
	Diethyl ether		C2H5OC2H5	35 (95)	220
	Diisopropyl ether	DIPE	C6H14O	69 (156)	285
	Dioxane		C4H8O2	101 (214)	220
	Ethanol	EtOH	C2H5OH	78 (172)	210
	Ethyl acetate	EE	C4H8O2	77 (171)	260
	iso Propanol	IPA	C3H7OH	82 (180)	210
	Isopropyl chloride		CH3CHClCH3	36 (97)	220
	Methanol	MeOH	CH3OH	65 (149)	210
	Methyl ethyl ketone	MEK	C4H8O	80 (176)	330
	n-Heptan		C7H16		0
	n-Hexane		C6H14	69 (156)	210
	n-Pentane		C5H12	36 (97)	210
	Petroleum ether BP 40 - 60°C			40 (104)	210
	Petroleum ether BP 65 - 100°C			65 (149)	210
	Pyridine		C5H5N	115 (239)	350
	Tetrahydrofuran	THF	C4H8O	66 (151)	220
	Toluene	Tol	C7H8	111 (232)	245

Run evaluation

SepacoreControl offers multiple user definable features such as peak tracking, the ability to highlight fractions of interest and to add comments. User specific flow charts and records can be exported as PDF files.

Color coded tube recognition and tube numbering for quick location of the desired fraction.

Zoom in / out as well as taking snapshots to highlight important sections for professional reports.

www.buchi.com/chromatography

Quality in your hands