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Version :	1.1	Author:	CR	Date	22.08.2022

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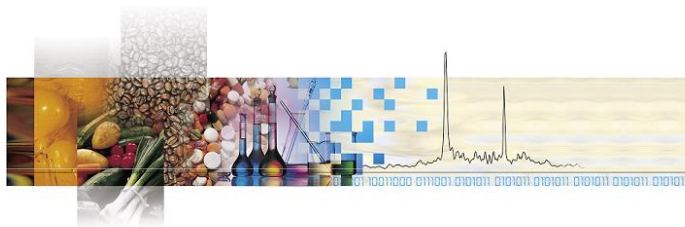
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## Version 5.07.058

Version	Changes	Date
5.07.058	<ul style="list-style-type: none"> <li>The audit trail can be very long - Audit trail entries up to 65,000 lines can be displayed.</li> <li>When the audit trail window is opened, a maximum of the last 1000 lines are displayed. The date input fields can then be used to display a longer period.</li> <li>The Audit Trail window has two new buttons to browse 1000 lines forwards or backwards.</li> <li>The title bar of the audit trail window shows the displayed period and the number of rows.</li> <li>Audit trail export to csv is possible up to 65000 lines (was limited to 32000).</li> <li>Dispenser communication is now visible in the serial communication window.</li> <li>Possibility to reset GLP Parameter of UV Detector (password protected)</li> <li>Removed not used items from program setup</li> <li>Signatures only available if user administration is active</li> </ul>	10.10.2024

## Version 5.07.057

Version	Changes	Date
5.07.057	<ul style="list-style-type: none"> <li>Dispenser errors are displayed directly in the dispenser visualization window with text and a red LED.</li> </ul> <p>In case of a dispenser error, the dispenser command pipeline is no longer processed.</p>	04.07.2024

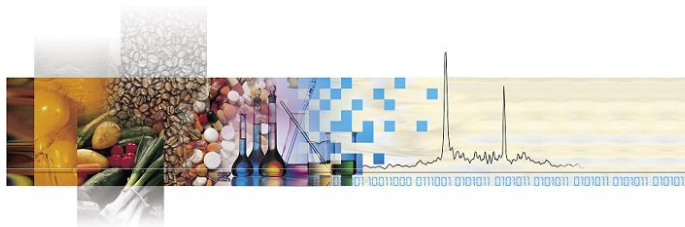


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- In case of a dispenser error, a message box appears and a running method will be stopped.
- The dispenser is displayed upside down in the dispenser visualization according to reality.
- Graphical revision of the dispenser visualization.
- The method name is printed in bold in the report.

## Version 5.07.056

Version	Changes	Date
5.07.056	<ul style="list-style-type: none"> <li>• Dispenser command pipeline is processed simulated in DemoMode.</li> <li>• Dispenser type "XCalibur 4-Pos" implemented.</li> <li>• Graphics for dispenser valve head in dispenser window replaced by new ones.</li> <li>• Manual actions are printed in bold in the report.</li> <li>• Time control file rows at time 0.0 minutes are now also logged when loading the time control file.</li> <li>• The time control file rows are displayed with numbers in the time control file editor, time control file printout and in the visualization window of the time control file.</li> <li>• The Reconstruction window gets the menu items "Channel" =&gt; "Deselect All" and "Select All" for selecting and deselecting all channels of a loaded result file together.</li> <li>• The "Stop all" function is now logged with the executing cause.</li> <li>• The separator for the CSV export can be selected via the Ini-file entry "MainWindow" =&gt; "DefaultCSVSeparator=". The default is ",".</li> <li>• The report printout section "Manual Operations" contains "no manual operations" if there are no entries.</li> <li>• The log window gets the menu items "Signatures" =&gt; "Review", "Approval", "Responsibility" and Authorship for subsequent digital signatures.</li> <li>• New audit trail entry for the path of the results file.</li> <li>• Bugfix: The preset values for Minor Pump were not printed correctly.</li> <li>• Bugfix: The global pressure dimension entered in the Ini-file was not used in many displays and printouts.</li> <li>• Bugfix: The Winsock ports were also attempted to be opened in</li> </ul>	27.06.2024



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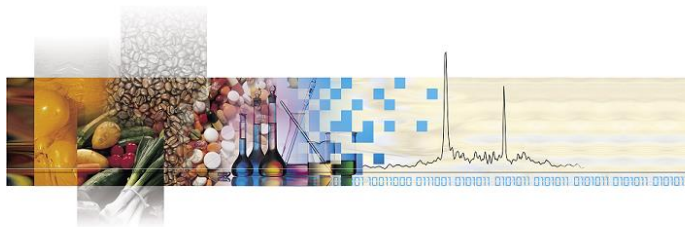
DemoMode (entries in "Errors.txt").

- Bugfix: "Windows 10" and "Windows 11" are now also displayed in the Welcome window.
- Bugfix: The contents of the windows "Audit Trail", "Protocol" and "Peak Results" have not been adjusted when the window is maximized.
- Bugfix: Time control file function "Digital Output" was logged twice.
- Bugfix: The logged start time of a method could deviate slightly from the real time due to a rounding error.
- Bugfix: The expiration date of the user password was not reset when a new password was entered.

## Version 5.07.016 – 5.07.055<sup>1</sup>

5.07.055	Pressure dimension for major and minor pumps can be configured in SynthraView.ini: <i>[PUMPS]</i> <i>PressureDimension=bar</i>	12/09/2023
5.07.054	Bugfix in RadioCorrection if Channels > 6 are selected in Method-Activity	31/08/2023
5.07.053	A new initialization password is displayed in a more readable font	31/08/2023
5.07.052	Bugfix report printing with run logs over multiple pages, Main window menu item <i>contact</i>	30/06/2023
5.07.051	Remote control via event box: 8 (instead of 2) tcf files from inifile	12/07/2023
5.07.050	Read in serial eventbox (events 1-4 from RCONT, 5-12 from eventbox), Remote Control using event box, revision of audit trail viewer	15/12/2021
5.07.049	Bugfix: print compare units	22/07/2021
5.07.048	Bugfix: crash in time table editor on selection of channels	19/01/2021
5.07.047	User administration right "report printing"	16/11/2020
5.07.046	Bugfix: Hold over midnight	15/10/2020
5.07.045	Version dependent query of GLP parameters (Runge LED), dispenser type XL3000	16/07/2020
5.07.043	Bugfix: midnight problem with elapsed time when run was started after software had been running over night could lead to execution of all commands at once	23/01/2020
5.07.042	New detector: Runge LED detectors, GLP parameters in About win-	11/11/2019

<sup>1</sup> Missing version numbers used for internal test versions

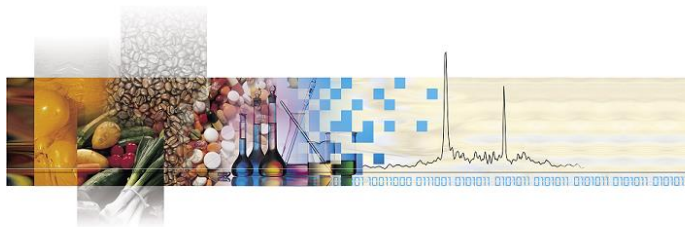


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	dow	
4.07.041	Bugfix: removing multiple objects from visualization( remove all objects)	07/03/2019
5.07.039	Bugfix: not remove checklist in run protocol during RestartTimeControl	09/01/2019
5.07.038	Bugfix: import time tables adjusted to new max. number of lines	05/07/2018
5.07.037	Bugfix: graphical time table editor, print chromatogram compare in colors, stop channels set baseline mode (slicewidth 500) only if all channels stopped,	15/06/2018
5.07.036	Max. number of visualisation objects 200 instead of 100	06/04/2018
5.07.035	Bugfix: Jump to next line in Demo mode, insert data points during hold in demo mode, time table editor setting channels in stop data channel in time	22/08/2018
5.07.034	Bugfix during saving peak windows of result files (wrong number of autosampler table length could lead to crashes)	15/08/2017
5.07.033	Max. number of time table lines 1000 and max. number of protocol lines 1050 instead of 550	16/08/2017
5.07.032	possible slicewidth in steps of 100 ms	27/04/2017
5.07.026	Bugfix: Show last chromatogram	19/04/2017
5.07.025	Remote commands via Ethernet on port 22761 for start,stop,hold,continue	05/01/2017
	Max number of time table lines 500 instead of 300	
5.07.024	Automatic export to csv	26/10/2016
5.07.023	Bugfix: insert time during hold	08/06/2016
5.07.022	Bugfix: Runtime Error 9 on Show Peakvalue	26/05/2016
5.07.021	online moving in analysis window removed	20/04/2016
5.07.018	Bugfix: correct runtime in annotation for manual hold	15/04/2016
	Temperature limit from inifile and message on enter of higher values	
	Bugfix: Jump to next line could lead to too long data traces	
	Shortcuts F10,F11,F12 in all forms	
	Annotation for manual continue	
5.07.017	Readout GLP Parameters of Sykam UV	12/04/2016
	Protocol entry manual hold	
5.07.016	Bugfix: Report printout of protocol date	09/02/2016

### Version 5.07.001 – 5.07.015<sup>1</sup>

Version	Changes	Date
5.07.015	Bugfix: Color Settings of Labels in Visualisation	28/01/2016
5.07.014	Bugfix: Temperature and Voltage Control Window positions	28/01/2016



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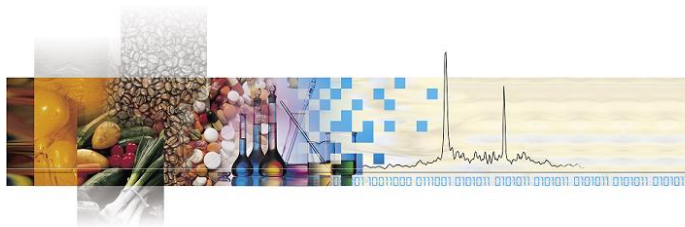
5.07.011	Bugfix: Move Information Label in Visualisation Setup	07/12/2015
5.07.010	Bugfix: Header Calibration Table	07/12/2015
5.07.009	Bugfix: Axis Labels in Reconstruction, Error message in RadioCorrection	20/11/2015
5.07.008	Bugfix: Size of Message Box 'Jump To Next Line' Index of Menu for function Load Time Control File in Time Table Editor	20/11/2015
5.07.007	Bugfix: Jump To Next Line	19/11/2015
5.07.006	Shortcuts F7, F8 F9 for Valve Switching or Virtual Switches	16/11/2015
5.07.005	Software Clean Up (removed unused code, renamed variables, etc.) Improved User Administration, Visualisation, Time Table Editor, Compare Chromatograms, Comments and Documentation	21/10/2015

## Version 5.06.001 – 5.06.030<sup>1</sup>

### Version Changes

5.06.030	Bugfix: Simulation Mode in Time Table Editor Edit Display Color of Physical Channels in Visualisation	11/08/2015
5.06.029	Included Heater10,	25/03/2015
5.06.027	Skip Connecting to Winsock Boards with ESC Digital Outputs 10-12 added to Setup and Event Box windows	14/01/2015
5.06.024	Updated Windows Versions in Welcome Message	11/11/2014
5.06.022	Shortcuts F11 and F12 in Analysis Window for Function "Peak cut" acts on Power Switch	29/09/2014
5.06.021	Less Dispenser Error Messages	25/09/2014
5.06.020	UART on RCONT Mini Board usable for Dispenser, Valves , Major and Minor Pump Shortcuts F10,F11 and F12 in Analysis Window for Functions "Hold", "Peak cut" Channel Windows of used channels cannot be closed	25/09/2014
5.06.017	Bugfix: Toolbar in Chromatogram window	07/07/2014
5.06.016	Bugfix: Clear Time Table resets all Options	16/04/2014
5.06.015	Bugfix: Export Chromatogram	10/12/2013
5.06.014	Bugfix: Index Calibration in Time Table Editor	23/09/2013
5.06.013	Chromatogram Window Don't Allow X Axis Range < 0.0001	03/07/2013
5.06.012	Bugfix: Report Printing	06/06/2013
5.06.011	Bugfix: Winsock Port communication	26/04/2013
5.06.010	Error messages in Report Printing, Bugfix: Communication	26/04/2013
5.06.007	Automatic Close Welcome Window	16/01/2013





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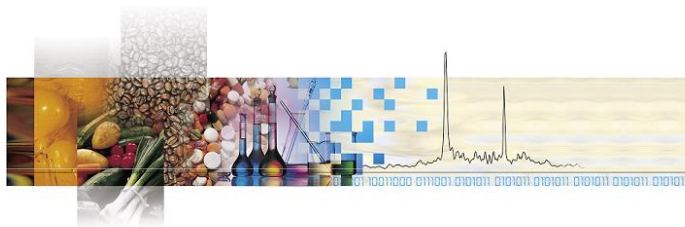
5.06.006	Maximal Number of Visualisation Objects increased to 200	07/01/2013
5.06.005	Detect corrupted Configuration files	10/12/2012
5.06.003	Bugfix: Open previous Time Control File in Time Control Editor	16/11/2012
5.06.001	Add Temperature Zone 9	25/09/2012

### Version 5.05.001 – 5.05.022<sup>1</sup>

Version	Changes	Date
5.05.022	Renamed Flow Controller -> Minor pump implemented WinsockPorts 1 to 8 for device control via LAN	29/08/2012
5.05.021	No Processing of Time Control File Lines between Wait Function and Continue Bugfix: Activate/Deactivate Time Table Functions	19/07/2012
5.05.020	Bugfix: Time Stamps in Result File documentation Print Option for Manual Operations	08/06/2012
5.05.017	Bugfix: Display Digital Outputs in Threshold Table	02/04/2012
5.05.016	Bugfix: Scaling in Channel Properties	20/03/2012
5.05.013	More Printing Options in Reconstruction Tabulator Printing Options in Time Control File editor	15/02/2012
5.05.008	Implemented Manual Integration	04/01/2012
5.05.006	Sykam UV S3210 : Set UV Wavelength and Set Range adjusted, .ini-File entries	18/05/2012
5.05.004	“Show Functions” and “Show Last Chromatogram” deactivated in Analysis Window	26/04/2012
5.05.002	SynthraView.exe unchanged, new Installation Setup including Rcont.dll Version 1.0.6.6. for RCONT Firmware version 1.5	28/03/2011
5.05.001	Win98 Styles removed Bugfix: Visualisation DispenserValve Function Wait for new condition “PeakCut finished”	15/03/2011

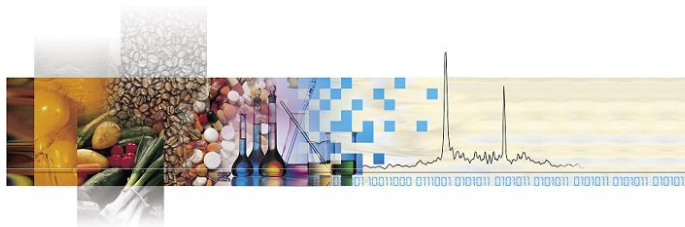
### Version 5.04.001 – 5.04.058<sup>1</sup>

Version	Changes	Date
5.04.058	Implemented valves (PCF8574AP)	09/03/2011
5.04.057	Inverted CTS-Signal logic	24/02/2011
5.04.056	Deactivate button Show Functions .ini-File Entry Demoversion Pump Pressure available for User defined channels	02/12/2011
5.04.054	Bugfix: Closing Channel windows during Time Control File execution	12/11/2011



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	Bugfix: .ini-File Parameter for Analysis Windows	
5.04.053	Bugfix: Display Value Labels	10/11/2010
	Bugfix: Checklist Printing	
5.04.051	.ini-File Entries for Analysis Window (minimize channels)	08/11/2010
5.04.050	CTS-Function configuration in .ini-File	29/10/2010
	Cyclic ASK only send to Major Pump	
5.04.049	Bugfix: Dispenser Init	26/10/2010
	Bugfix: Double Click on customize toolbar	
	Bugfix: Scaling Integration Window	
	Bugfix: Time Table Editor (move lines)	
5.04.043	Manual Pump Control active during time control file execution	14/07/2010
	Reload Time Control File on Restart Function	
5.04.041	Print Check List	22/06/2010
5.04.039	Retention times in Peak table w.r.t. Chromatogram start (instead of time table start time)	01/06/2010
	Bugfix: Report printing w/o installed printer	
	Rename Event box to Digital I/O Control	
	User administration (Delete user, exit without saving possible)	
5.04.038	Dont display licence data	27/04/2010
	Bugfix: Visualisation label	
5.04.037	Vacuum pump visualisation object	27/04/2010
	Window position of all "Always on top"-windows	
	Rescaleing analysis window	
5.04.036	Maximal number of time table lines 300	23/02/2010
	Display Progressbar calibration in progress	
	17 physical channels in visualisation	
	9 digital outputs (event box)	
	8 Temperature Preset Values	
5.04.033	Automatically adjust Window sizes to window scheme	01/12/2009
5.04.032	New error message No data acquisition possible (shuts down Synthreview)	24/09/2009
5.04.031	Manual Sample ID: enter additional information	01/09/2009
5.04.030	Dispenser visualisation Init Position as in .ini-File	03/08/2009
	Bugfix: Chromatogram window (Error while scaling Grafik)	
	New button in main window "open current working folder" starts window file explorer	
5.04.029	Bugfix: Dispenser speed calculation (division by 0)	09/07/2009
5.04.025	Serial number in Welcome Window	16/04/2009
5.04.024	Print Chromatogram zoomed	08/04/2009
	Bugfix: Analysis window (timing opening windows)	
5.04.023	Bugfix: Wait for Input – Dispenser Ready	02/04/2009
	Edit X- and Y- Scale in Analysis Window (Double Click on Axis)	



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5.04.022	Allow Time Control File without Pump Parameters	30/03/2009
5.04.021	Bugfix: Dispenser speed	24/03/2009
5.04.020	Bugfix: Valve Locking Setup, control of Multicom Interfaces	09/03/2009
5.04.019	16 instead of 8 Serial Ports	05/03/2009
5.04.018	Different Welcome Window	17/02/2009
5.04.017	Bugfix: Print in Time Table Editor	06/02/2009
5.04.016	Tooltips in Visualisation for Major Pump System	02/02/2009
5.04.015	Bugfix: Calibration (no peaks found)	29/01/2009
5.04.014	Integrationresults for Channel 9-17	28/01/2009
5.04.013	Manual Sorting of Time Table Function Lines (same time)	27/01/2009
5.04.012	Bugfix: Time Table Visualisation	23/01/2009
5.04.011	Bugfixes: Time Control Editor Function Init Dispenser, Pump Control and Volume Display Units	07/01/2009
5.04.009	Major Pump System in Visualisation Setup	
5.04.009	Manual Control of Minor Pump System	04/12/2008
	Integration of 17 data channels	
	Log Function for Minor Pump, Residual Volume Dispenser 1-4	
5.04.007	Shortcuts F10,F11,F12 for Hold, Fraction/Waste, Continue	23/10/2008
	Yield calculation including Start- and Product Activity	
5.04.006	Bugfix: Threshold Function for Channels greater 9, Printer logo,	08/10/2008
5.04.005	Bugfix: Activity Tab, Dispenser 3 and 4, Preset	23/10/2008
5.04.004	Activity Tab in Configuration uses 16 Channels	23/09/2008
5.04.002	Yield calculation revised	12/09/2008
	Preset button in Visualisation	
	.ini-File entry for Background color in Display Labels	
	Modular Report Printing	
	Descriptions for Valve Positions, Dispenser and Dispenser Valve Positions in Configuration	
5.04.001	Expansion to 16 data channels	21/07/2008