

## Important Information for the Installation of PurityChrom®

**Please refer to the Installation Guide and the KNAUER instrument control manual for installation.**

1. PurityChrom operates under Microsoft Windows XP, Windows Vista, Windows 7, Windows 8 and Windows 10.
2. Insert the CD which includes the PurityChrom.
3. Connect your devices. All devices that should be connected by LAN should be set to LAN and need fixed IP addresses.
4. The user account settings have to be set to “Never notify” before installation. After the installation the settings can be reset. (Start → Control Panel → User Accounts → User Accounts → Change User Account Control Settings → Never notify)
5. Restart your computer.
6. Start the installation as administrator. The installer will ask you to choose the language of the software, your integrated UV-detector and the destination location for the files that will be installed. Do not change the given destination.
7. If the installation is finished, copy the license file (PurityChrom.lic) located on the CD (in folder: *License*) to C:\PurityChrom and insert the USB license dongle into a free USB port of the computer.
8. If the folder on the CD: *Drivers\PurityChrom* includes necessary driver files (\*.dll), copy these files to C:\PurityChrom and replace the existing files.
9. Copy and replace the PurityChrom.ini-file located on the CD (in folder: *INI*) to C:\Windows.
10. Copy and replace the PurityChrom.cfg-file located on the CD (in folder: *CFG*) to C:\PurityChrom.
11. Copy the background (\*.bmp) located on the CD (in folder: *Visualisation\Background*) to C:\PurityChrom\Visualisation\Visualisation Backgrounds
12. Copy the visualisation (\*.vis) located on the CD (in folder: *Visualisation\Files*) to C:\PurityChrom\Visualisation\Visualisation Files
13. If the folder on the CD: *Visualisation\Objects* includes files, copy the files to C:\PurityChrom\Visualisation\Visualisation Objects
14. If the folder on the CD: *Methods* includes methods, copy this folder to C:\PurityChrom\Data and replace the existing folder.
15. Automatic switching to energy saving mode or hibernating has to be disabled i.e. settings for “Turn Off Hardware”, “Turn off Computer” or “System Standby” must be set to “Never” in the control panels energy options. If Microsoft Security Essentials is installed, please exclude

PurityChrom. Therefore, open Microsoft Security Essentials and go to Setup. In “Excluded files and processes” you have to search for C:\PurityChrom\PurityChrom.exe and add this process to the excluded processes. Furthermore, the Windows Defender and antivirus software must be deactivated

16. Start the software. The license will be recognized and can be used. Do not remove the dongle while PurityChrom® is running.
17. The KNAUER Interface Box IFU 2.1USB requires a separate driver for the built-in USB-to-serial controller. If no VSCOM USBtoCOM box is installed, you can install the driver from the PurityChrom CD, folder:  
*Drivers\COM Extensions\VSCOM USBtoCOM\Version\_2.08.28\_Win7, XP, 2003, x86\_x64.*  
The file must be executed with administrator access.  
For Windows 8.1 please use the IFU 2.1 driver from the following folder:  
*Drivers\COM Extensions\VSCOM USBtoCOM\Version\_2.08.30\_81\_Win8.1*
18. The KNAUER RID 2.1L requires a separate driver. Copy the driver RID21L.dll from C:\PurityChrom\DriverDll\Data Acquisition to C:\Windows\System32 (32-bit system) or C:\Windows\SysWOW64 (64-bit system) and rename to PrepconLF.dll.
19. The KNAUER CT 2.1 requires a separate driver. Copy the driver CT21A.dll from C:\PurityChrom\DriverDll/Device Control to C:\Windows\System32 (32-bit system) or C:\Windows\SysWOW64 (64-bit system) and rename to thermocontrol.dll.
20. Installation under Windows versions older than 8 and 10: Install PurityChrom. Go to C:\PurityChrom and right-click the PurityChrom.exe to open the properties. Go to compatibility and check “Run this program in compatibility mode for” and choose “Windows Vista (Service Pack 2). After this, check “Run this program as an administrator“ click ”Apply“ and ”Ok“, than close the window.
21. Installation under Windows 8 or 10: Go to C:\PurityChrom and right-click the PurityChrom.exe to run the program as administrator. Open the visualization and the communication-log once.  
  
*Please note:* If the error message "**PrepCon5.dll not found**" appears, run the “Microsoft Visual C++2015 Redistributable” setup. You will find the setup in the PurityChrom program folder C:\PurityChrom\DriverDll\Redistributable 2015
22. Detailed instructions can be found on the CD (in folder: *Installation*).
23. KNAUER is not responsible for lost dongles. Losing the dongle means losing the license for software.
24. Restart your computer and the software PurityChrom once a week.

## Checklist: Creating methods in PurityChrom ®

1. Methods are called "Time Control Files".
2. You have the possibility stop your pumps if you pause your run with the "Hold" button. Therefore check "Stop Pumps at Time Control Hold" in "Options".
3. Start your method at time/volume point 0 with the function "Composition Major Pump" or "Composition Minor Pump" and with the Function "Flowrate".  
Major Pump: Buffer Pump  
Minor Pump: Feed Pump  
A maximum of 50 lines can be written in the method for each pump.
4. If you are using both pumps during the run, choose the composition and flow rate for both pumps at time point 0. You can choose a flowrate of 0 ml/min for the pump you want to start later.
5. Choose the default position of all your used valves at time point 0
6. Choose your wavelength (function "Wavelength") and your required channels with the function "Start Chromatogram" from time point 0.02 (not 0.0).
7. Don't forget to program an autozero.
8. To program a gradient, you need to include all the angles of this gradient as compositions. A linear gradient will be calculated between two different compositions at two different time points. Program a small time difference between the compositions to create a step in your gradient. Using a P2.1L the smallest time difference should be 0.06 minutes.
9. To start fractionation using a fraction collector, change the position the valve of your fraction collector from "Waste" to "Fraction". The function "Collector" enables you to move the collector arm to the wished position ("Step": The arm will perform a step to the next position). Don't program the function "Collector" at time point 0. To set a maximum volume for fractions use the function "Fraction Limit". The current position of the fraction collector arm will be remembered until the program is switched off and on again.
10. To start fractionation using a fraction valve, change the position the valve of your fraction collector from "Waste" to "Fraction". You can choose a distinct position or the command "Next Step" to go automatically to the next position. To set a volume use the function "Fraction Limit". The current position of the fraction valve will not be remembered by the software.
11. Program the function "Stop All" at the end of your method. The function "Stop Chromatogram" is only needed to if you want to restart your method automatically (function "Restart Time Control File"), if you want to link another method to your method (function "Load new File").