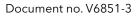
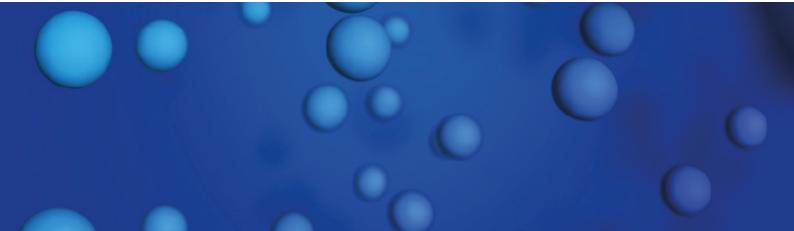
Science with Passion



Mobile Control Version 6 Software instructions









Note: For your own safety, read the instructions and observe the warnings and safety information on the device and in the instructions. Keep the instructions for future reference.



Note: In case you require this instruction in another language, please submit your request including the corresponding document number via e-mail or fax to KNAUER.

Support: Do you have questions about the installation or the operation of your instrument or software?

International Support:

Contact your local KNAUER partner for support:

www.knauer.net/en/Support/Distributors-worldwide

Support in Germany

(Austria & Switzerland on case-to-case basis):
Phone: +49 30 809727-111 (workdays 9-17h CET)
Fax: +49 30 8015010
E-mail: support@knauer.net

Publisher:	KNAUER Wissenschaftliche Geräte GmbH				
	Hegauer Weg 38				
	14163 Berlin				
	Germany				
	Phone:	+49 30 809727-0			
	Fax:	+49 30 8015010			
	Internet:	www.knauer.net			
	E-mail:	info@knauer.net			

Version information: Document number: V6851-3

Version number: 1.0

Release date: December 23, 2022

Translation of the original edition

The information in this document is subject to change without prior notice. For the latest version of the instructions, visit our website: www.knauer.net/library.



- **Sustainability:** The printed versions of our instructions are printed according to Blue Angel standards (<u>www.blauer-engel.de/en/uz195</u>).
 - **Copyright:** This document contains confidential information and may not be reproduced without written consent of KNAUER Wissenschaftliche Geräte GmbH.

© KNAUER Wissenschaftliche Geräte GmbH 2022 All rights reserved.

AZURA® is a registered trademark of KNAUER Wissenschaftliche Geräte GmbH.

Table of contents

1.	Product inf	ormation	1
2.	Mobile Co	ntrol	3
	2.1	New features in version 6.0	3
	2.2	System requirements	3
	2.3	Supported devices	4
	2.4	Mobile Control Certificate	5
3.	Installation		7
	3.1	Download and installation	7
	3.2	Activation of the software	10
		3.2.1 Start screen	
		3.2.2 License activation	
		3.2.3 Selecting the trial version3.2.4 Selecting the demo tour	
		3.2.4 Selecting the demo tour	
		3.2.6 License validity	
		3.2.7 Mobile Control manual	
4.	Starting Mo	obile Control	14
	4.1	First steps	14
		4.1.1 Connecting the PC/notebook/tablet to a network	14
		4.1.2 Create a user account	17
	4.2	General user interface4.2.1Control elements	
5.	System Ov	erview	21
	5.1	System configuration	21
	5.2	Categorization of the functional blocks	
		25	
		5.2.2 Synchronous switching of two valves	27
	5.3	Device status	29
	5.4	Widget View	29
	5.5	Detail View	29
		5.5.1 User interface	
		5.5.2 Assistant ASM 2.2L	
		5.5.3 Assistant ASM 2.1L.5.5.4 Autosampler	
		5.5.5 Column thermostat	
		5.5.6 Detector	
		5.5.7 Interface Box IFU 2.1 LAN	
		5.5.8 Pump	
		5.5.9 Valve	
		5.5.10 Synchronized switching	
	5.6	Eluent Control	39

6.	Methods &	Sequences	.43
	6.1	General interface	. 43
	6.2	Add a method	. 46
	6.3	Method interface	. 47
	6.4	Settings	.48
	6.5	Eluent Delivery	. 50
	6.6	Sample Injection	. 50
	6.7	Detection	. 51
	6.8	Fraction Collection	. 51
	6.9	Export and import methods	. 52
	6.10	Edit, export or delete multiple methods	. 53
	6.11	Start a method6.11.1Starting a single method6.11.2Starting several programs/sequences6.11.3Preview run	. 57 . 59
	6.12	Audit trial	. 61
	6.13	Add a sequence	. 61
	6.14	Variables	. 64
7.	Run Queue		.66
	7.1	General interface	. 66
	7.2	Show progress and history	. 67
8.	Chromatog	gram view	. 69
	8.1	Live traces	. 69
	8.1	Showing/hiding traces, defining left y-axis	. 70
	8.2	Normalize traces	. 72
	8.3	Add Second y-axis	. 73
	8.4	Zoom into the screen8.4.1Via hand8.4.2Via mouse	. 74
9.	Checks & T	ests	.75
	9.1	GLP	. 75
	9.2	System Check	
10.	Column N	Ianagement and System Pressure	. 87
11.	Logs & Er	rors	.90
	11.1		
12	Settings		
121	•	General	
	12.1	12.1.1Configuration managment12.1.2Network settings	. 92

		12.1.3 12.1.4	Reset of LAN settings to DHCP Preferences	
		12.1.5	About	. 96
	12.2		nents	
		12.2.1 12.2.2	General interface	
		12.2.2	Autosampler	
		12.2.4	Column Thermostat 2.1	101
		12.2.5		
		12.2.6 12.2.7	Interface Box IFU 2.1 LAN	
		12.2.8	Gradient Typ	
		12.2.9	Valve	107
	12.3	User m	anagement	
		12.3.1	Create a new user.	
		12.3.2 12.3.3	Change user account	
	10 /			
	12.4	12.4.1	Is	
		12.4.2	Energy Options	
13.	Special Fe	atures.		119
	13.1		on Collection	
	10.1	13.1.1	Detail View	
		13.1.2	Method	120
14.	Data View	er		125
14.	14.1	Load a	a chromatogram	126
14.	14.1	Load a Chrom	a chromatogram	126 127
14.	14.1 14.2	Load a Chrom 14.2.1	a chromatogram atogram window Overlay of two measurements	126 127 128
14.	14.1 14.2	Load a Chrom 14.2.1 Method	a chromatogram	126 127 128 130
14.	14.1 14.2 14.3	Load a Chrom 14.2.1 Method 14.3.1	a chromatogram atogram window Overlay of two measurements ds Integration Parameters	126 127 128 130 130 134
14.	14.1 14.2 14.3	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters s Appearance.	126 127 128 130 130 134 134
14.	14.1 14.2 14.3	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters s Appearance. Preferences	126 127 128 130 130 134 134 134
	14.1 14.2 14.3 14.4	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters s Appearance. Preferences. About.	126 127 128 130 130 134 134 134 134
14.	14.1 14.2 14.3 14.4 Firmware	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters is	126 127 128 130 130 134 134 134 134 134
	14.1 14.2 14.3 14.4 Firmware 1 15.1	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard Reset	a chromatogram atogram window. Overlay of two measurements	126 127 128 130 130 134 134 134 134 135
	14.1 14.2 14.3 14.4 Firmware 1 15.1	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard Reset	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters is	126 127 128 130 130 134 134 134 134 135
	14.1 14.2 14.3 14.4 Firmware 1 15.1 15.2	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard Reset	a chromatogram atogram window. Overlay of two measurements	126 127 128 130 130 134 134 134 134 135 135
15. 16. 17.	14.1 14.2 14.3 14.4 14.4 Firmware V 15.1 15.2 Troublesho Repeat Ore	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard a Reset Update oting.	a chromatogram atogram window. Overlay of two measurements ds Integration Parameters Integration Parameters Integration Parameters Preferences Abpearance Preferences About	126 127 128 130 130 134 134 134 134 135 135 135 136 140 141
15. 16. 17.	14.1 14.2 14.3 14.4 14.4 Firmware V 15.1 15.2 Troublesho Repeat Ore	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard a Reset Update oting.	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters Name Appearance. Preferences. About. LAN settings e firmware version of connected devices	126 127 128 130 130 134 134 134 134 135 135 135 136 140 141
15. 16. 17.	14.1 14.2 14.3 14.4 14.4 Firmware V 15.1 15.2 Troublesho Repeat Ore	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard a Reset Update ooting ders	a chromatogram atogram window. Overlay of two measurements ds Integration Parameters Integration Parameters Integration Parameters Preferences Abpearance Preferences About	126 127 128 130 130 134 134 134 134 135 135 135 136 140 141 142
15. 16. 17.	14.1 14.2 14.3 14.4 Firmware V 15.1 15.2 Troublesho Repeat Or ENDIX A (A 1.1	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard Wizard Update ooting. ders Configu Minim	a chromatogram atogram window. Overlay of two measurements ds. Integration Parameters s Appearance. Preferences. About. LAN settings e firmware version of connected devices fration of flow and pressure	126 127 128 130 130 134 134 134 135 135 136 140 141 142 142
15. 16. 17.	14.1 14.2 14.3 14.4 Firmware V 15.1 15.2 Troublesho Repeat Or ENDIX A (A 1.1	Load a Chrom 14.2.1 Method 14.3.1 Setting 14.4.1 14.4.2 14.4.3 Wizard Reset Update Doting. ders Configu Minim Config A1.2.1	a chromatogram atogram window. Overlay of two measurements . ds. Integration Parameters . Integration Parameters . Appearance. Preferences. About. LAN settings . e firmware version of connected devices . 	126 127 128 130 130 134 134 134 134 135 136 140 141 142 142 142

Product information 1.

The Mobile Control is a perfect addition to your chromatography data system and can be sufficient to operate your instrument in stand-alone mode. Mobile Control completes two main tasks: On the one hand the software provides full access to AZURA® devices and features all functionalities of a display. On the other hand Mobile Control can be used to operate devices or even whole systems with dedicated tasks. Program for hand-held devices which operates with Windows 10.

- Licenses and **Operating modes**
- Display without data acquisition
- Full with data acquisition
- Fraction Collection with data acquisition and fraction collection option
- Upgrade to Full
- Upgrade to Fraction Collection

Note: This manual only describes the functionalities of the Mobile Control. Note the instructions of the respective devices.

Identification

Legend

The software name, manufacturer name, article no. and serial number can be found on the device card, which is in the scope of delivery.



Fig.1-1 Device card

Target groups This instruction addresses persons who are qualified as chemical laboratory technicians or have completed comparable vocational training.

The following knowledge is required:

- Fundamental knowledge of liquid chromatography
- Knowledge regarding substances that are suitable only to a limited
- Extent for use in liquid chromatography
- Knowledge regarding the health risks of chemicals
- Participation during an installation of a device or a training by the company KNAUER or an authorized company.

What must be taken into account?

- All instructions of the devices described in this document
- Environmental, installation and connection specifications in the instructions national and international regulations pertaining to laboratory work
- Good Laboratory Practice (GLP)
- Accident prevention regulations published by the accident insurance companies for laboratory work

- Power strip: If several devices are connected to one power strip, always consider the maximum power consumption of each device.
- Power supply: Only connect devices to voltage sources, whose voltage equals the device's voltage.



2.

Mobile Control

2.1 New features in version 6.0

- Single installer for Mobile Control and Data Viewer
- New devices: Foxy R1/ R2, Vario-4000/ Plus, P 8.1L, 40D, 50D, 40P, 80P
- Fraction Collection option time, volume, threshold based
- Live Traces Traces are displayed beyond a running method
- Variables for method parameters
- Direct Control during a running method
- Eluent Control
- Manual Integration in Data Viewer
- Do not stop pumps in case of disconnection
- Column Management
- System pressure sets a maximum pressure for the whole system
- Export of X- and Y-values of traces
- HTML graph export as vector graphic
- Start of run setting: Skip autosampler injection
- Logs in report
- Widget View which is designed for better reading if you operate a big number of instruments.
- Global standby button for the whole system
- Monitor Mode is no longer supported due to technical reasons
- Bugfixes and optimization

2.2 System requirements

Parameter	Requirement		
Operating system	Microsoft Windows® 10		
Display size	Minimum 10"		
Minimum screen resolution	1280×800		
RAM	1 GB without data collecting 2 GB with data collecting		
CPU	1.33 GHz		
Processor	Dual-Core		
Disc space	500 MB		

Supported devices 2.3

Device type	Туре	Minimum required firmware version		
Assistant	AZURA ASM 2.1L	V 01.18		
	AZURA ASM 2.2L	V 01.14		
Autosampler	AZURA AS 6.1L	V 01.22		
	AZURA AS 3950 2.1LA	V 01.17		
Column thermostat	AZURA CT 2.1	V 01.06/V 02.02		
Detector	AZURA RID 2.1L	V 01.24		
	AZURA UVD 2.1L	V 02.06		
	AZURA DAD 2.1L*	V 01.12		
	AZURA DAD 6.1L*	V 01.26		
	AZURA MWD 2.1L	V 01.12		
	AZURA UVD 2.1S	V 01.14		
	BlueShadow 40D - ADI01, ADI04	V 02.05		
	BlueShadow 50D - ADJ01, ADJ11	V 02.18		
Fraction Collector	Foxy R1/R2#	V 01.01.11		
	Vario-4000/Plus#	V 01.25		
Interface box	IFU 2.1 LAN	V 01.05		
Pump	AZURA P 2.1L	V 01.09		
	AZURA P 6.1L	V 01.07		
	AZURA P 2.1S	V 01.38		
	AZURA P 4.1S	V 01.38		
	AZURA P 8.1L	V 01.01		
	BlueShadow 40P - APC30XX	V 01.12		
	BlueShadow 40P - APC40XX, APC60XX	V 02.30		
	BlueShadow 80P - APD30XX, APD60XX	V 02.26		
	BlueShadow 40P - APD20XX,	V 01.08		
Valve	AZURA V 2.1S	V 05.01		
	AZURA VU 4.1	V 06.22		

* no acquisition of 3D data supported (4 channels only) # only one rack type is supported per device. Racks of different type cannot be combined in one device.

X = A-Z

2.4 Mobile Control Certificate

After purchasing a Mobile Control license, KNAUER provides a certificate (containing activation code, serial numbers and more). Keep the certificate secure.

Legend

- Activation code
- Serial number tablet

1

1

- ③ Article number
- 4 Serial number Mobile Control license

Sci	ence with Passion
Mol	bile Control Certificate
This (certificate is proof that KNAUER grants the license for the software product "Mobile Control" to the mer.
Activ	ation of Mobile Control (not required for pre-configured tablets):
1.	Install Mobile Control software
2.	Start Mobile Control software
3.a)	Display license: Press the start button to enter the display operation mode.
3. b)	Data or Fraction Collection license: The entry of an activation key is required. Send the Device Code and the serial number of the Mobile Control license (starts with FSA) to <u>mobilecontrol@knauer.net</u> .
î	Note: The device code does not include 0 and 1, but O and I. The device code is linked to the network adapter. Do not deactivate the network adapter. The device code will change every time the software is started. This does not influence the validity of the activation code. The activation code is hardware-bound and cannot be transferred to another tablet, laptop or desktop PC.
	It: KNAUER will send you an activation code. This code activates the software product. Until the activa- code is provided, use the trial version of Mobile Control with full functionality.
	oftware instructions, installation, updates and upgrades refer to the corresponding information docu- s (see: <u>www.knauer.net/mobile-control-downloads</u> → tab: Information).
Lice	nse / Operating Mode
	Display - without data acquisition
1	Data - with data acquisition
	FRC - with data acquisition and fraction collection option
	Upgrade to Data
	Upgrade to FRC
	Operating system Windows 10
	Software version v6.0.3
	Activation code YQOM-LPAL-OJI4-ZS7D-GOGA
	User name Admin
	Password 12345
	Serial number tablet e93kl39672
	Article number A9608
Seria	I number Mobile Control license FSA225000001

Note: Before activation, the Mobile Control will generate a new device code every time the Mobile Control is opened. It is insignificant which of these codes you send to KNAUER together with the serial number of the purchased license, as the activation code provided by KNAUER is valid for all device codes generated by this end device.

Note: With activation of Mobile Control, the license is linked to the MAC address of the network adapter of the device and cannot be transferred to another device. If the device goes out of operation, one more license may be generated for a new device. Contact the KNAUER technical support for a new license.



Note: You can use the activation code to activate the latest version of Mobile Control. Mobile Control updates are for free. No need to ask for a new code. Refer to the installation information update (included in the download folder).



3.

Installation

3.1 Download and installation

Four types of modes are available:

1. Demo Mode

- offers an overview of the MC functionalities
- operation of virtually connected devices is possible
- simulation of methods, sequences and data aquisition
- free of charge

2. Trial Period

- full functionality (like fraction collection license) for 30 days
- free of charge

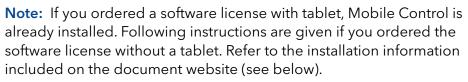
3. Display Version

- full functionality without data acquisition
- every update is free of charge

4. Licenses that require activation

- full functionality with data acquisition (refer to chapter 2.1 for functions)
- various functionality depending on the license full or fraction collection
- every update is free of charge

Note: There are two **independent installers** for Mobile Control and Firmware Wizard. Please perform two individual installations. The Mobile Control license/installer includes the Data Viewer.





Note: If you have a previous version, deinstall it.

Delete **C:/Mobile Control** after securing of the data. The system configuration and all programs must be created new. Refer also to the installation information included on the document website (see below).

Download the latest installation information from our website: <u>www.knauer.net/mobile-control-downloads</u>, section downloads.

Process	Figure
 Download the zip-folder including the installer of Mobile Control and Firmware Wizard from the website: www.knauer.net/mobile-control-downlog 	2
2. A zip-file will be downloaded. After successful download, extract the content of the zip-folder and run the files "Mobile Control vX.X.X.exe" and "Firmware Wizard v.X.X.X.exe".	
3. An install wizard opens.	
4. Select <next>.</next>	Mobile Control Setup - 🗆 🗙
 Enter customer information. Select <next>.</next> 	Mobile Control
	Fig. 3-1 Installation of the software
6. Select <install>.</install>	Mobile Control Setup – – ×
	Sinstall Close
	Fig. 3-2 Installation of the software
7. The software will be installed on your computer.	Mobile Control Setup – – × Mobile Control Setup Progress Processing: Mobile Control
	Cance Fig. 3-3 Installation of the software

Process	Figure
8. Complete the installation by selecting <finish>. A desktop icon will be created.</finish>	Mobile Control Setup Completed the Mobile Control Setup Wizard Cidk the Finish button to exit the Setup Wizard. Back Finish Cancel Fig. 3-4 Installation of the software
 Double-click the Mobile Control icon to open the software. 	Fig. 3-5 Desktop icon

Activation of the software



i

3.2

3.2.1

Note: If you order a Mobile Control license together with a tablet, KNAUER delivers the configured tablet with activated Mobile Control and certificate.

Note: Make sure that the WLAN or LAN is switched on before entering the activation code.

3.2.2 License activation

Start screen

Note: No activation is required for the display license. Press the start button to enter the display operation mode.

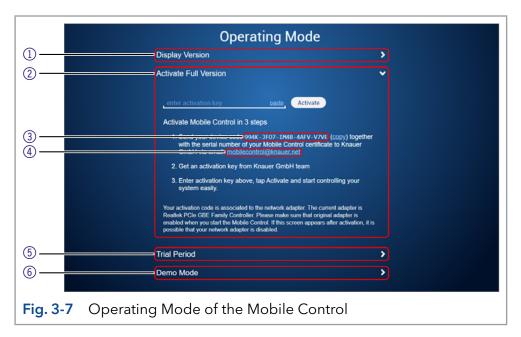


Fig. 3-6 Software Mobile Control

After starting the Mobile Control the first time, a 20-digit device code is generated. This device code is linked to the MAC address of the network adapter of the hand-held device on the Mobile Control is installed (see below).

Legend

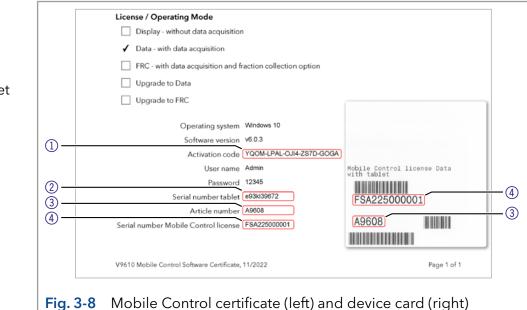
- 1 Display Version
- ② Activate Full Version (currently selected)
- ③ Device code (see also section 3.2.2.2)
- ④ E-mail address: (see also section 3.2.2.1)
- (5) Trial Period(see also section3.2.3 Trial period)
- 6 Demo Mode(see also section3.2.4 Demo mode)



Note: A non-activated Mobile Control will generate a new device code every time the software is started. It is insignificant which of these codes you send together with the serial number of the license, in order to request the activation code, as the provided activation code is valid for all device codes generated by the end device.

3.2.2.1 Activation via automatically generated e-mail

- 1. Click on the mail address. A mail with your device code will be generated (if the mail is not generated, proceed as explained in chapter 3.2.2.2).
- **2.** Add the serial number of your software before sending. You find it on the device card or the certificate, delivered with your order (starts with FSA...).
- 3. Send the mail.



3.2.2.2 Activation via copy of the device code

- 1. Press the <copy> button and open your mail program.
- 2. Paste the code in mail.
- **3.** Add the serial number of your Mobil Control license before sending. You find it on the device card, delivered with your order. It begins with FSA (refer to Fig. 3-10).

Send a mail to mobilecontrol@knauer.net.

Note: Until the activation code is provided, just start the trial option with full functionality.

3.2.2.3 Activation via trial version

Go to SETTINGS > ABOUT. Click Upgrade link. A new window opens. You can activate your Mobile Control via activation code (refer to chapter 3.2.2.1).

Legend

- Activation code Mobile Control/ Chrom
- Serial number tablet
- ③ Article number
- ④ Serial number MC license

) Settings	About			
Central Configuration Management Network Settings Preferences About Instruments if Frac. Collector Vario User Management	Mobile Control Version Activation Chrom option Colume text Praction collector Praction collector Options Peterate notes	5.8.110 UCPY-645Y-R6QH-F6RX-547C Upgade Activated Descrived Activated	Contacts Copyright 0.2014-2022 (XMARE) Wissenschaftlichte Cerate CmMI Hangare: Weg 28, 14163 Reling, Cerminity www.Kalauset.net Developed by XMAREI and Inteles Co. www.kitclics.com All rights reserved	2
* a Advanced Settings Energy Options				

Fig. 3-9 Activation via Trial version

3.2.3 Selecting the trial version

Press the <Start Trial> button to activate the software with full functionality for 30 days.

3.2.4 Selecting the demo tour



Note: The trial option features the functionality of the fraction collection license.

- Press the <Demo Mode> button to activate the software in the demo mode or
- 2. Select Demo as user during the LogIn.



Note: Virtual devices can only be found if tablet is connected to a router.

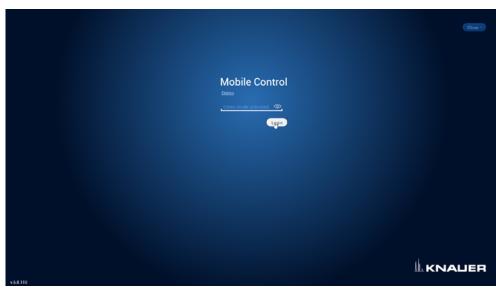


Fig. 3-10 Log into Demo mode

3.2.5 Updating the Mobile Control

To update the Mobile Control, download the latest version from the <u>KNAUER website</u>. Mobile Control updates with the same article number are free of charge.

Uninstall the previous version of the Mobile Control before installing the updated version. In advance you can export programs saved in the old version and save the collected data.

The latest update information is included in the download folder. You can also download this file from our website: <u>www.knauer.net/mobile-control-downloads</u>.

3.2.6 License validity

After activation, the license is linked to the MAC address of the WLAN or LAN adapter of the PC/tablet/notebook and cannot be transferred to another device. If the device goes out of operation, one more license may be generated for a new hand-held device. Contact the KNAUER Technical Support for a new license. Mobile Control updates are for free. You can use the activation code to activate the latest version of Mobile Control.

KNAUER Technical Support:

Phone: +49 30 809727-111 E-mail: <u>mobilecontrol@knauer.net</u>

You can make your requests in English and German.

Re-installing the operating system on the same device has no effect on the validity of the license because the license is linked to the hardware of the device. The activation code may be entered again.

3.2.7 Mobile Control manual

The manual is provided for download on the KNAUER website www.knauer.net/en/Support/User-manuals/Software.

When you order a Mobile Control with a tablet, the manual as PDF file is included.



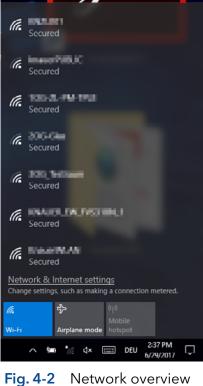
Starting Mobile Control 4.

First steps 4.1

Connecting the PC/notebook/tablet to a network 4.1.1

To operate the devices with the Mobile Control, a LAN connection has to be established between the PC/notebook/tablet and the WLAN router. All devices are connected via LAN cables with the WLAN router.

Process	Figure
The highlighted icon in the lower left of your display indicates the status of the network connection.	
 Click on the symbol to enter the network set- tings on your tablet. 	∧ 📾 (*) (1× 📰 DEU 2:36 PM
Mobile control will be supported for tablets/ PCs/notebooks running with operating system Microsoft Windows 10.	Fig. 4-1 Open the zip-file
2. Select the network you want to connect to.	<i>R</i> . Secured

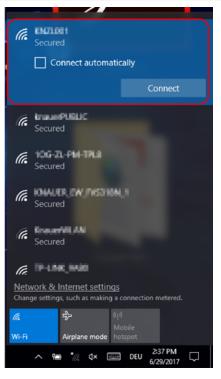


Process

3. Select <Connect> to connect to the network.

You can activate the checkbox to connect automatically to this network.

Figure



- Fig. 4-3 Connecting to the network
- 4. If required, enter the password.
- 5. Click <Connect>.
- **6.** After successfully checking the network requirements, the computer is connected.



Process

7. If the network symbol on the lower left side has changed, your network connection is working.

Figure



Fig. 4-5 Network status

 You can also check or edit your network connection in the Mobile Control app: SETTINGS > CONFIGURATION MANAGE-MENT.

1

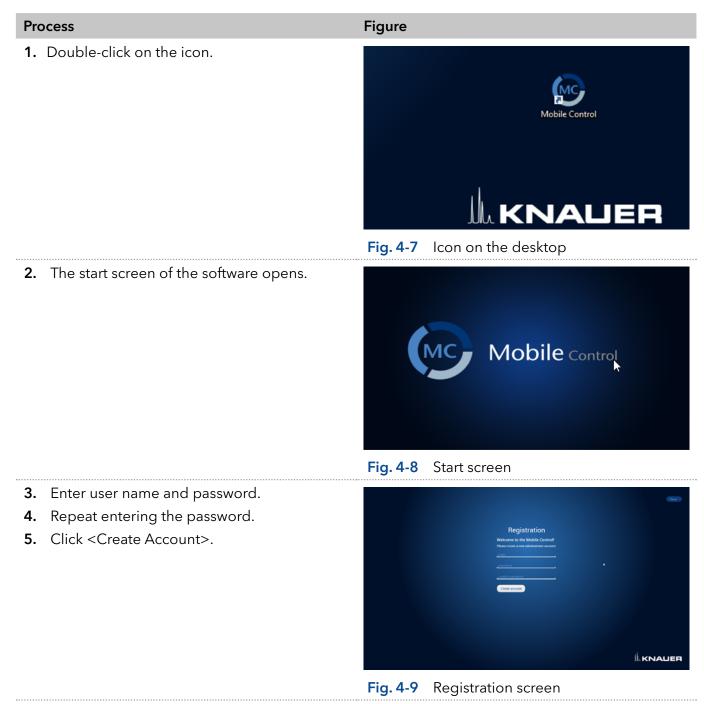
	Settings	System Co	nfigur ation				Austy
5	General			Name	Access	SSID	Actions
	Configuration Management	 ۰	1	Demo	Demo		
	Network Settings						
	Preferences			D.			
1	About						
	User Management						
ł.	Demo						
	Advanced Settings						
	Energy Options						

Fig. 4-6 Configuration list in the software

Note: If WLAN connection is lost, all pumps will stop with exception of the standalone pumps AZURA® P 4.1S and AZURA® P 2.1S. Compact pumps integrated in an assistant also stop automatically in this case.

4.1.2 Create a user account

If you start the Mobile Control for the first time, you are prompted to enter a user name and a password. This user (administrator) has full access to the Mobile Control and can create additional users, edit them or assign rights (refer to chapter 12.3).

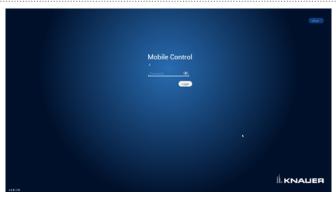


Note: If you received a tablet with a pre-installed Mobile Control, KNAUER has set up a user account for you already. In this case, the **user name** is 'Admin' and the **password** is '12345'. You can find this information on the provided certificate as well. The user name and the password can be changed (refer to chapter 12.3).

i

6. Log in by entering the user name and password or click <Close> to close Mobile Control.

i



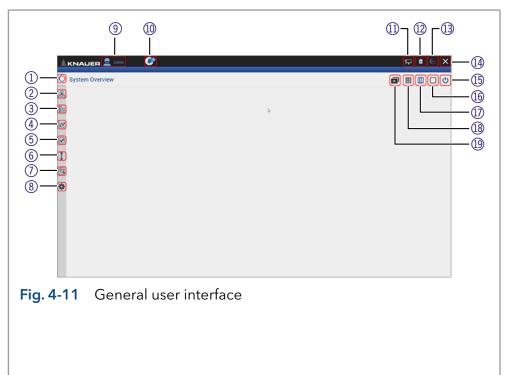


Practical tip: If more than one configuration is defined, it is necessary to select the required configuration. For more information, see chapter 12.3.

4.2 General user interface

Legend

- System Overview
- ② Methods and Sequences
- ③ Run Queue
- (4) Chromatogram View
- 5 Checks & Tests
- 6 Column Management
- 1 Logs and Errors
- ⑧ Settings
- ④ Logged User
- ① Error Messages
- LAN Connection
- 1 Battery Status
- 🚯 Data Viewer
- ① Exit/Logout
- (15) Standby/Power up
- 16 Detail View
- System Overview
- Widgetview
- (1) System Configuration



1	9

	4.2.1 Control elements
Control element	Explanation
\cap	System Overview
U	 Shows an overview of all connected devices with the most important parameters.
모	Methods & Sequences
66	 List of all saved methods and sequences.
—	Run Queue
8	 Overview of processable methods and sequences.
t a P	Chromatogram View
2.4	The Chromatogram shows the live data of detectors, pumps and valves.
_	Checks & Tests
	 Displays GLP data for the selected device.
	 Performs a system check.
t	Column Management
1	 Create a column library. Individual columns can be given a maximum pressure and the number of injections is tracked.
6	Logs & Errors
	 Lists all errors and system logs.
*	Settings
245	General
	 Configuration Management: Create new or edit existing configurations and define the system configuration, summarizes all configurations with the rout- er SSID and authorized users.
	 Network Settings shows network interfaces and LAN settings.
	 Preferences displays basic settings in the software.
	 About: The section lists the software version number, activation code, con- tacts, release notes and installation information with troubleshooting hints.
	Instruments
	 A list of all connected devices is displayed. You can change the settings of each device.
	User Management
	 User accounts or the Demo account for the Demo Mode can be created or edited.
	Advanced Settings
	 Energy Options displays standby mode settings and wakes up devices from standby mode.
	System Configuration
	Shows existing system configuration.

Control element	Explanation
200 m	Widget View, System Overview, Detail View
	 Toggles between Widget View, System Overview and Detail View.
Pump P 6.1L HPG FAMI4110011	Device Widget
	 Displays most important parameters depending on the device.
	 Push the widget to enter the Detail View of the device.
0.000 _{ml/min}	
0 _{bar} A1 100% B1 0%	
	Error messages
	 Displays error messages. Click on the icon to read them.
Stop	Stop
	Stops the run.
\sim	Exit/Logout
\sim	 Exit closes the application.
	 Logout logs out the current user and displays the login screen.
ch	Standby/Power up
<u> </u>	 Sent into standby or power up single, all or a selection of devices
Run	 Button with different functionalities, e.g. Run or Stop.
Pressure ter 750 ter	Text field and slide control
0 250 500 750	 Slide control sets values. The set value is displayed in the text field.
	Enter the numeric value by tapping the text field.

() 5. System Overview

5.1 System configuration

In the system configuration you can determine the group of devices which are controlled by Mobile Control.

The devices can be assigned in four categories: Eluent Delivery, Sample Injection, Column & Periphery, Detection, Fraction Collection. This classification is continued through Mobile Control, e.g. to facilitate method writing.

Practical tip: For easier handling, all device components in the menu "Methods" are arranged in the same way as the tabs in menu "System Overview". Before you add a programm we recommend to ensure correct system configuration.

5.2 Categorization of the functional blocks

Note: Only one instrument can be assigned to fraction collection block.

Device	Block	Maximum device number
Autosampler	Sample injection	1
Column Thermostat	Column & periphery	2
Detector, Interface box IFU 2.1 LAN	Detection	3 (max. 6 signals)
Pump	Eluent delivery	6
Valve	Sample injection	20 (12 pcs. in assistants)
	Column & periphery	
	Fraction collection	only Multiposition valves
Fraction Collector	Fraction collection	1

Note: The maximum allowed number of valves is 20, which does not depend on the combination of the functional blocks and within these blocks.

Process

1. Click on <System Configuration> to configure your system.

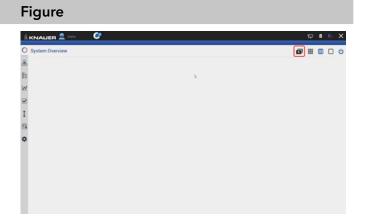
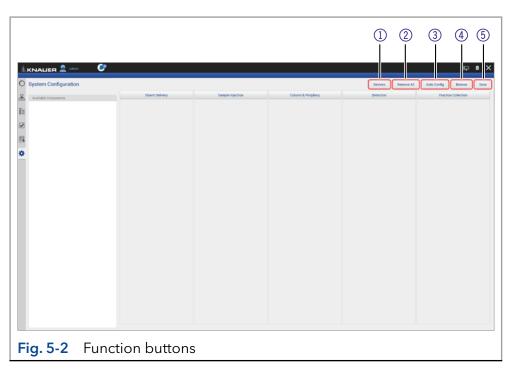


Fig. 5-1 System Configuration overview



Legend

- ① Use **Devices** to manually configure Virtual detector, Foxy and Vario-4000 fraction collectors.
- ② **Remove All** deletes the actual system configuration.
- ③ **Auto Config** performs an automatic configuration with connected devices in the network.
- ④ **Browse** searches for all devices in the connected network and displays them on the left side (available instruments, does not apply to fraction collector Foxy and Vario-4000).
- (5) Always use **Save** to confirm your selection.

Process

2. Virtual Detector - Select an exported signal csv file whose first trace is played by the virtual detector.

Vario-4000 fraction collector.

Figure

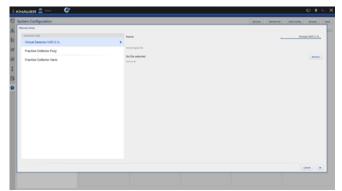
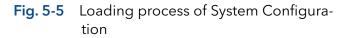


Fig. 5-3 Manual Configuration
8. Enter the name, serial number, IP address and IP port to manually configure the Foxy or

stem Configuration		(Denter, Denter, All Anti-Carly Boose)
Amud setup		
Indivativent Type	Name	Frac. Collector Pory #1
Virtual Detector UVD 2.11,	Serial number	FOX30000000
Fraction Collector Fory	P address	192,168.63
Fraction Collector Vario		
	SP Post	
		(and)

Fig. 5-4 Manual Configuration

Available instruments	Eluent Delivery				
		Sample Injection	Column & Periphery	Detection	Fraction Collection
Thermostet CT 2.1					
PCC211810077					
Interface IFU 2.1					
#U051101					
		Initializing			
		manging.			
		-			



5. On the left side all available/online devices are shown.

4. The software loads all connected devices.

This may take a few seconds.

System Configuration		Devices Nemove Al Auto Config Brows					
Available Instruments	Eluent Delivery	Sample Injection	Column & Periphery	Detection	Fraction Collection		
Detector 50D DNA254100001							
Thermostat CT 2.1							
POC211610077							
Interface IFU 2.1							
Publit 101							
4							
F							



- 6. Select <Browse>.
- 7. Drag and Drop to shift the device into the block.



Drag and drop of the devices Fig. 5-7

	0				₽ \$ G)
System Configuration			Dest	ces Renove All Auto	Config Browse Save
Available Instruments Detector 50D DAU-204130001 Thermostat CT 2.1	During Pd.31, LPG	Sample Injection	Column & Periphery	Defection	Fraction Collection
Interface IFU 2.1		b			

8. Press the "Settings" symol 🔹 or on the device to enter the device settings.

9. Here general device settings are shown. Refer to chapter 12 for further information.

configured automatically.

Fig. 5-8	Settings sym	bol of the devices
	oo aan go oy n	

lettings	Pump P 6.1L LPG			Apply
General	Name	Pump P 6.1L LPG	Connectors	
Configuration Management	Serial number	FBE133700001	Start input	0
Network Settings	Network Settings	1000	Analog Output	
- /	IP Port		Offset	-
Preferences	DHCP Static		Full scale	
About	IP address	172.16.5.248	Signal source	De
Instruments	Subnet mask	255.255.255.0	Time constant	
Pump P 6.1L LPG	Gateway	172.16.5.1	Pressure Offset	
User Management	Leuk Sensor		Actual interpreted pressure	
* admin	Sensitivity	Low	Actual interpreted pressure	Set to Zero
Demo	Pump Head Settings		Factory Settings	
Advanced Settings	Pump head	auto detect	Restore defaults	
Energy Options	Mixing chamber	100 μ,	Eluent control	
	Pump Gradient Type			
	Gradient type		P Max	







11. After confirming the configuration with <Save>, an overview of the system configuration is shown (System Overview). Below each symbol device-specific parameters are displayed.

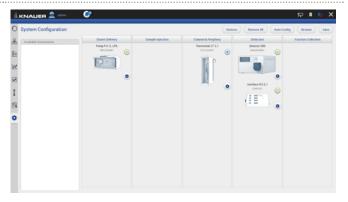


Fig. 5-11 Overview connected devices

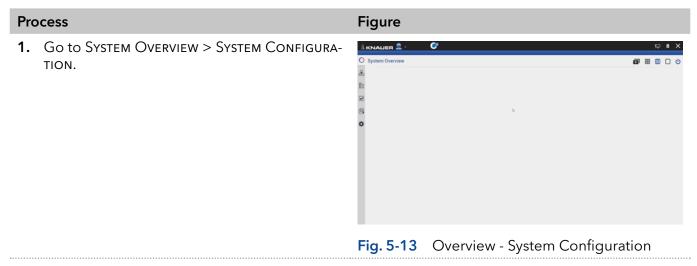
- **12.** Go to System Overview.
- **13.** You see the system configuration with most important device specific parameters below the widget.
- **14.** Click on device status button or the device to enter the detail view.



Fig. 5-12 System Overview listed devices

Note: If you want to face more than one system configuration, add new configurations in configuration management (refer to chapter 12.4.1).

5.2.1 Binary HPG (high pressure gradient) configuration of AZURA® P 2.1L pumps



2. Drag the pump with your finger to the functional blocks and dropit into the eluent delivery.

	KNALER 🚨 -	C ?					₽ • © >
С	System Configuration					Denkers Remove All	Auto Config Browne Save
8	Available instruments	the	nt Delivery	Sample Injection	Column & Periphery	Detection	Fraction Collection
=	Pump P 2.1L Isocratic rA0132180811	Pump P 2 Isocrati		•	•	•	•
2		raciz					
2							
I							
3		11					
*	1		0				
	and the second second						

Fig. 5-14 Drag and drop first pump

i

i

Note: The pump you shift at first in the functional block is set as HPG A automatically. You can change this setting later in menu Device settings. Refer to chapter 12.2.8.

3. The pump is part of the system configuration.

C	System Configuration			Devic	ns Remove All Auto O	onlg Browse Sav
	Available Instruments Pump P 2.14, Isocretic rA0132110061	Dureit Delivery Purg P 2.31, horostik Increases Total Control of C	Sample Injection	Column & Perghery	Detection	Fraction Collection
- 000		¢				
*						

Fig. 5-15 First pump in System Configuration

- **4.** Drag and drop the second pump.
- **5.** The first pump will be highlighted, indicating you can synchronize both pumps. Drop the second pump into the violet "Synchro" frame.
- 6. Confirm your action with <Save>.



Fig. 5-16 Drag and drop second pump

Note: If you want to add two seperate AZURA® pumps P 2.1L, drag and drop the second pump below the "synchro" widget.

7. A message confirms the setup of the Binary HPG pump.

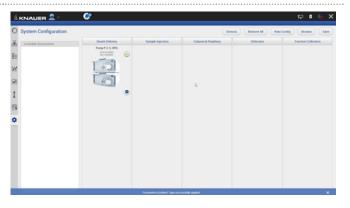


Fig. 5-17 View of the synchronized pumps

8. Go to SETTINGS to edit/view the device settings of the synchronized pumps (also refer to chapter 12.2.8).

Note: Setting a Binary HPG of two compact pumps AZURA® P 2.1S/P4.1S is not supported.

5.2.2 Synchronous switching of two valves

Synchronous valve switching enables for example column selection or sample loop selection.

You can synchronize values of the same type, e.g. 2x 6 Multiposition values or 2×6 port 2 position values. You can synchronize values of the same type, which have the same number of position.

Synchronization of valves works for block:

- Sample Injection
- Column & Periphery



Note: You can synchronize valves inside an assistant or stand-alone valves, but you cannot synchronize a valve inside an assistant with a stand-alone valve.

Process	Figure
 Go to SYSTEM OVERVIEW > SYSTEM CONFIGURA- TION. Click <browse> to get a list of all connected devices.</browse> 	Image: Second
	Fig. 5-18 Enter System Configuration

3. Drag and drop the first valve in the appropriate column.

4. The valve is part of system configuration.



- hump P 6.1L LPG Valve 6Port 6Por I
- 5. Drag and drop the second valve. The first valve will be highlighted, indicating you can synchronize both valves. Switch the second valve into the violett "Synchro" frame.

Fig. 5-20 Configured valve



Fig. 5-21 Drag and drop of the second valve

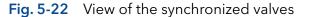
Note: If you want to add 2 independent valves, drag and drop the second valve below the "synchro" widget.

6. Always confirm your settings with <Save>.

i

7. Tap on the device symbol to enter the detail view.

0	System Configuration			Omice	s Benove Al Ad	to Config Browse Sav
8	Available instruments	Eluent Delivery	Sample Injection	Column & Periphery	Detection	Fraction Collection
Ē	Thermostat CT 2.1 PCC211810077			Spectronous Valves		
N	Pump P 6.1L UPG			33		
				0		
~						
I						
G,						
¢				6		
ì						



Addition of a valve Fig. 5-19

5.3 Device status

Device Status	Ready	Running	Busy	Error	Standby
Color of the light	\bigcirc	\bigcirc	0		0

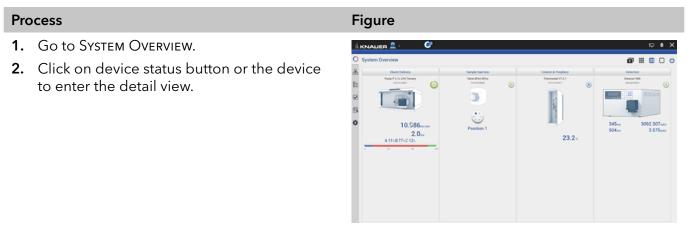
5.4 Widget View

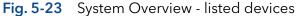
The widget view is made for a clear overview of the most important parameters of many devices.

5.5 Detail View

The Detail View is entered by clicking on the widget of the desired device in the System Overview. In the Detail View you can directly control the device and read its parameters.

5.5.1 User interface





Legend

- Apply
- 2 Cancel
- ③ Device status and important parameters
- ④ System Configuration
- 5 Widget View
- 6 System Overview
- Detail View
- 8 Standby/Power up
- ④ Shifts to next device
- 🕦 Purge
- 1 Run
- 1st and 2nd page of Detail View
- (3) Shifts to previous device

Image: Second	Pump P 6.1L HPG Apply Cancel Channels area	3 4 5 6 7 8
E Presure limits w <u>0w</u> , <u>300w</u> 0 100 300	A1 _ A2 _ B1 _ D2 A1 _ 100_ B1 _ 0_ C_	Status: Off • •
(M. Valve 6Port 6Pos) 13 (Fig. 5-24 Overview - De		L Pump P 4.15 >

Practical tip: Parameters in the upper right device status frame are sent directly from the device (real time).

Note: Always confirm your settings with <Apply>. Except for P 4.1S/P 2.1S standalone devices, all other pumps start pumping at a flow rate entered in the detail view by clicking on apply. If the pump is not to start, a flow rate of 0 ml/min must be entered.

5.5.2 Assistant ASM 2.2L

The modules of the Assistant ASM 2.2L are shown as independent devices in the System Overview. The events of the assistant device can be controlled in the module that is positioned first from the left in the module docking station. If the module is a valve drive VU 4.1 configured as a fractionating valve, the events cannot be controlled.

5.5.3 Assistant ASM 2.1L

The picture below shows an example for a configuration of an Assistant ASM 2.1L.

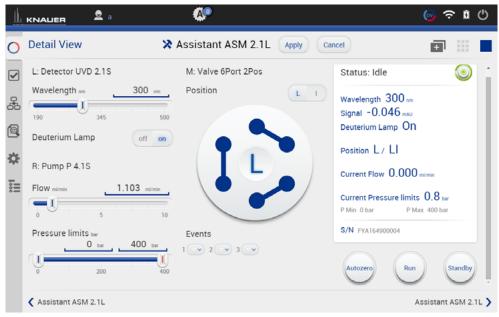


Fig. 5-25 Detail View - Assistant

Possible devices of an assistant:

Pump	
Flow	Set the flow rate by entering the value or with slide control.
Pressure	Set the minimum and maximum pressure by enter- ing the value or with slide control.
Valve	
Position	You can change the position of the valve, by Enter the position or click on the position of the valve on the display.
Detector	
Wavelength	Tap the text field and enter the required value. You can also adjust the value by slide control.
Deuterium lamp	Choose between ON/OFF.
Events	
(from supported devices)	Events can be manually activated. They operate external devices (refer to the instructions of the re- spective device for more information) Choose between ON, Pulse or OFF.
	Note: Event controls are displayed in the detail view and method setting of the module in the leftmost position of the assistant.

5.5.4 Autosampler

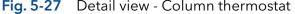
Detail View	Autosampler AS 6.1L Apply Cancel	Ø	000			¢
Temperature v 0v 4 13 22 SSV 1	b	Status: Idle Current Vial N/A Target temperature N/A c Measured Temperature 99.0 c ssv 1 / 6 Sr/N rzosziscosod	Transver	nsp, ssh	۲	

Fig. 5-26 Detail View - Autosampler

Temperature	Set the temperature by entering the value or with slide control (if temperature control is installed).
Move tray	The tray is moved to front or back (enter or remove vials).
Start wash	The autosampler starts a wash cycle to wash the needle.
Transp. wash	The autosampler starts a wash cycle using the transport liquid to wash the needle with it.

5.5.5 Column thermostat

Detail View			🖁 Thermostat CT 2	Apply Cancel	D	000	▥	
Target Tempu J Safety Limits	45 c	<u>5.0%</u> <u>31.0%</u>			Status: Off Target temperature			۲
< Thermostat CT	1					Th	ermost	at CT 2



Target Temperature	Choose a temperature within the range of Temperature safety limits. Steps of 1 °C are possible.

Temperature safety limits Safety limits can be set in the range of 5 °C and 85 °C.

5.5.6 Detector

Ch1 254 8 Signal Mode on detect of the set o	C	Detail View			Detector DAD 6.1L	Apply Cancel	•	000	▥	
Ch1 254 8 Signal Mode on detect of the set o		Channels: wavelength / Bandwitch			Signal Mode on	direct	Status: Idle			۲
Ch2 254 B Signal Mode cu direct D02254 <					Signal Mode on	direct				
100 500 Signal Mode or detect Desterium Lamp On Ch3 254 B Reference Correction on off on Ch4 254 B Reference Correction on off on Ch4 254 B Desterium Lamp off on Desterium Lamp off on off on S/N F0/1200001 Ref. 300 300 off on 100 595 1000 off on			595		Signal Mode ∞	direct	Ch2:254 mm - 104:682 mAU Ch3:254 mm - 104:682 mAU Ch4:254 mm - 104:682 mAU			
Aligon Lamp Aligon Lamp Halogen Lamp Halogen Lamp 100 505 1000 Peterence Correction col off on 100 505 1000 Peterence Correction col off on 100 505 1000 Peterence Correction col off on 100 505 1000 off on S/N For 1000001 100 505 1000 off on storeet			595	1000	Signal Mode cm	direct				
Ch4_254					Reference Correction cm	off on	Halogen Lamp Off			
Ref 300 30 Halogen Lemp off on 100 595 1000 000 000			595		Reference Correction or	off on				
Events b		190	595	1000	Deuterium Lamp	off on	S/N F0J132000001			
Events D		Ref. 360			Halogen Lamp	off on	Autozero			
		190	595	1000						
		Events			D.					
	,	Pump P 6.1L LPG						P	Pump P	6.1L L

Fig. 5-28 Detail view - Detector

Wavelength	Tap the text field and enter the required value. You can also adjust the value by slide control.
Events (from supported devices)	Events can be programmed or manually acti- vated. They operate external devices (refer to the instructions of the respective device for more information) Choose between ON, Pulse or OFF.
Signal Mode	Choose between Direct Signal and Inverted Signal. Direct Signal (+): Displays signal without modifications. Inverted Signal (-): Displays the inverted signal.
Reference correction (only AZURA® MWD 2.1L, DAD 2.1L and DAD 6.1L)	In order to minimize baseline drift due to re- fractive index effects, a reference wavelength can be set in order to correct the baseline.
	The reference should be set in the same spec- tral region as the signal wavelength (UV or Vis) but at a wavelength at which the analyte has no absorbance.
Deuterium lamp	tral region as the signal wavelength (UV or Vis) but at a wavelength at which the analyte has

Note: In case of detectors with 2 lamps, both lamps can be switched ON/OFF (e.g. AZURA® DAD 6.1L).

Flushing the reference cell (only AZURA® RID 2.1L)	The flush function activates the reference cell valve enabling this cell to be purged with eluent. The flush valve can be switched on and off immediately either via software or via analog command; alternatively via software a flush time program can be selected, whereby the valve is switched on and after a selected time span (30 s, 60 s, 120 s, 400 s) the valve is automatically switched off. The flush time pro- gram can be interrupted at any time with the off command.
Target temperature (only AZURA® RID 2.1L)	It is possible to select the temperature of the optical unit in the range 30-55 °C in 1 °C steps via software. We recommend to set the temperature 5-10 °C above the ambient conditions, in order to improve and ensure baseline stability.
Autozero	The detector performs an autozero.

5.5.7 Interface Box IFU 2.1 LAN

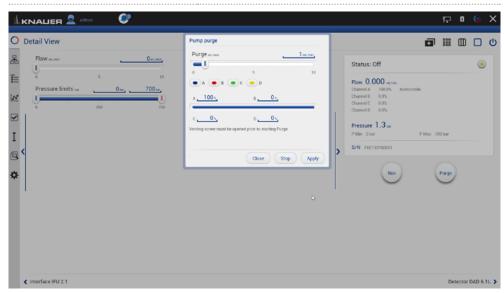
			Ð	ß	6	×
O Detail View	P Interface IFU 2.1 Apply Cancel	đ	000	▥		ሳ
Events		Status: Idle			۲	
		Signal 1: 0.223				
let.		Signal 2: 0.111				
		Signal 3: 0.084 m				
•		Signal 4: 0.125 ==				
1		S/N IF0061101				
©.						
\$						
			4			
Cetector DAD 6.1L			P	ump P	6.1L LF	PG >

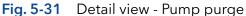
Fig. 5-29 Detail view - Interface Box IFU 2.1 LAN

AZ1 - AZ4	An autozero of the respective channel will be performed.
Events (from supported devices)	Events can be programmed or manually activated. They operate external devices (refer to the instructions of the respective device for more information) Choose between ON, Pulse or OFF.

5.5.8 Pump

		₽ 0 ⊝)
Detail View	Pump P 6.1L LPG Apply Cancel	
Flow m.me Omm.me S Omm. S Omm. Omm.	Channels === A B C C C C C C C C C C C C C C C C C C	Status: Off Flow 0.000 -c/res Charrel A 100% Accountile Charrel B 07% Charrel B 07% Charrel C 07% Charrel C 07% Pressure 1.3 w
I ∢ ≱	>	Plan Dar Planz 700 bar S/N FRE133700001
< Interface IPU 2.1 Fig. 5-30 Detail view - Pi	ump	Detector DAD 6.11
Flow		
Pressure limits	der Pressure limits and	maximum pressure un confirm with <apply></apply>
	Minimum and maximu slide controls or via th	um pressure is set with : e text field.
	Minimum pressure: Th after 30 seconds, if the the minimal pressure l case, if a leak is occure the system.	pressure goes below
	Maximum pressure: To the pump switches off pressure excesses the limit, e.g. in case of clo rate.	immediately, if the
Gradient	If a gradient-compatik bination has been con can be set under Deta have to be configured under Settings > Pum 12.2.7).	il View. Some pumps as gradient pump





Purge

Use this function, to remove air from the pump head or to change the solvent.

- 1. Open the venting screw at the pressure sensor to prevent a pressure surge and damage to the column.
- 2. Enter the flow under Purge.
- 3. Press <Purge>.

Refer to the corresponding pump instruction for further informations.

Detail View	Pump P 6.1L LPG Apply Cancel	1	-] :::	: 00		
Solvent A Acetomine Events 1 2 2 3 2 4 2 5 2 6 2 7 3 8 2	2	Status: Off Flow 0.000 sches Chareff 0.00 Chareff 0.00 Chareff 0.00 Pressure 1.3 w PMin Obs: Pt S/N FREISION	fax 700 bar		۲	
Interface IFU 2.1				Detecto	DAD 6	6.1

switch chann solver	ne of the blu to further s el A,B,C or l ots than liste	ettir D an	igs. Select [.]	the solvent
pressi In LPC vent fa	f the list and bility for a u 6 mode, you actor, even	ente ser c i car	elect the tex er the facto defined solv only selec	xt field in last or of com- vent. ct one sol-
i				
pump mine f pressu If PMa to run in ord flow sl currer eluent Switch	P 6.1L. It en now the pun ure is reache x Mode is ac with set pre er to keep th hould be no nt target flow t consumption	able np re ed. ctiva ssur- ne pr rmal v to p on d	s settings v eacts when ted, the pur e. The flow ressure. The lly in the rar prevent enc uring leaka e on and en	which deter- maximum mp continues is adjusted e maximum nge of your ormous ige. iter the max-
				F 8 6 X
P Max mode On On Se Max. flow IP -	9-com	<u>1L LPG</u> 700001 <u>10001</u>	Connectors Start input Analog Output Offset Full scale	Apply Cancel Enabled
	In LPC vent fa than c i This fu pump mine l pressu If PMa to run in ord flow sl currer eluent Switch imum	In LPG mode, you vent factor, even than one solvent. Note: Sol entered for 6.1L and R This function is on pump P 6.1L. It en mine how the pum pressure is reached If PMax Mode is and to run with set pre- in order to keep th flow should be no current target flow eluent consumpti Switch the PMax M imum flow. Confir	In LPG mode, you can vent factor, even the e than one solvent. Note: Solvent entered for the 6.1L and P 2.1 This function is only su pump P 6.1L. It enable mine how the pump re pressure is reached. If PMax Mode is activat to run with set pressure in order to keep the pr flow should be normal current target flow to p eluent consumption d Switch the PMax Mode imum flow. Confirm you	In LPG mode, you can only selective that one solvent. Note: Solvent factor can entered for the AZURA® 6.1L and P 2.1L. This function is only supported by pump P 6.1L. It enables settings within the number of the the pump reacts when pressure is reached. If PMax Mode is activated, the pump to run with set pressure. The flow in order to keep the pressure. The flow should be normally in the rar current target flow to prevent endered flow to prevent endered flow. Confirm your settings

D Interface IFO 2.1			
User Management	Pump Head Settings		Factory Settings
★ admin	Pump head	auto detect	Restore defaults
Demo	Mixing chamber	100 µL	Eluent control
Advanced Settings	Pump Gradient Type		P Max
Energy Options	Gradient type	LPG	P Max
	Constant pressure	off on	
	an of DMax mode		

IP address

Gateway

Sensitivity

>

Subnet mask



About

Pump P 6.1L LPG

Detector DAD 6.1L

I

Q

¢

EventsEvents can be programmed or manually ad vated. They operate external devices (refer the instructions of the respective device for more information)Choose between ON, Pulse and OFF.

172.16.5.248

255.255.255.0

172.16.5.1

Signal source

Time constant

Actual interpreted pressure

Disabled

Set to Zero

1 be

Reset

Reset off on off

5.5.9 Valve

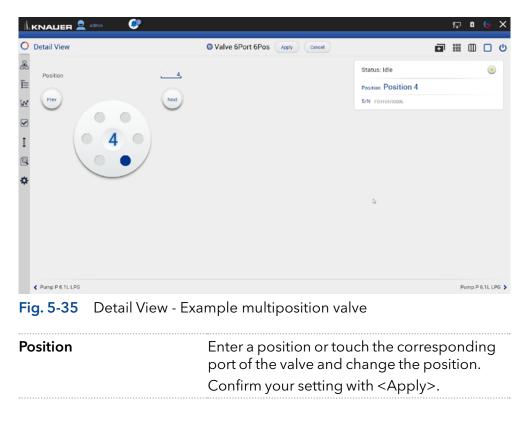
5.5.9.1 2 position valve

			P	Ø	6	×
O Detail View	Valve 6Port 2Pos Apply Cancel	٥	808	▥		Ċ
Position 1 2		Status: Idle				7
		Position 2				
× 👂 🥊		S/N FVH194700008				
	b.					
Ċ.						
- -						
Pump P 6.1L LPG				Pump P	6 11 11	PG
				and r	0.16.6	
-ig. 5-34 Detail View - I	Example 6 port 2 position	i valve				

Position	Choose between Load and Injection.
	Confirm your setting with <apply>.</apply>
	You can also touch the valve and change the
	position.

5.5.9.2 Multiposition valve

Both valves are switched synchronously, either via position text field or via <Prev>/<Next> buttons.



Prev/Next

Position will be switched to the previous or next possible position of the valve.

5.5.10 Synchronized switching

Both valves are switched synchronously, either via position text field or via <Prev>/<Next> buttons.

O Detail View	Valve 6Port 6Pos Apply Canc	
Position	3,	Status: Idle
E		Position 3
st Prev	Next	S/N FVH194700008
т 3 0		
¢		
	b,	
Pump P 6.1L LPG		Pump P 6.1L LPC
Fig. 5-36 Detail Vi	ew - Example synchronize	d valves
Position	Enter a position c	or touch the corresponding
	Besiden Position 3 S/N Position 3	
	•	•
	Commyour seu	ting with <appiy>.</appiy>
Prev/Next	Position will be sv	witched to the previous or
	next possible pos	sition of the valve

5.6 Eluent Control

i

Eluent Control is by default turned off. Activate this function in the setting of each pump in the system configuration.

Ŀк					≎ ß	© >
) :	Settings	Pump P 6.1L HPG			Apply	Cancel
3		Name	Pump P 6.1L HPG	Connectors		
	Instruments	Serial number	FAM141110011	Start input		Enabled
	Pump P 6.1L HPG	Network Settings		Analog Output		
	③ Valve 6Port 2Pos	IP Port	10011_	Offset		0.00
	Valve 8Port 4Pos	DHCP Static		Full scale		5V
	Valve 6Port 6Pos	IP address	192.168.1.109	Signal source		Flow
	Column Sel. Valve	Subnet mask	255.255.128.0	Time constant		0.1 s
	Column Sel. Valve	Gateway	192.168.1.109	Pressure Offset		
	Valve 16Port 16Pos	Leak Sensor		Actual interpreted pressure		0
	Detector UVD 2.1L	Sensitivity	Low		Set to Zero	Reset
	Assistant ASM 2.2L	Pump Head Settings		Factory Settings		
	Assistant ASM 2.2L	Pump head	auto detect	Restore defaults		Reset
	X Assistant ASM 2.2L	Mixing chamber	250 µL (bio.)	Hestore deladits		neset
	User Management		soo he (oro.)	Eluent control		off o
	Demo	Pump Gradient Type		P Max mode		of
	Advanced Settings	Gradient type	HPG			
	Energy Options	Constant pressure	off on			

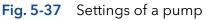
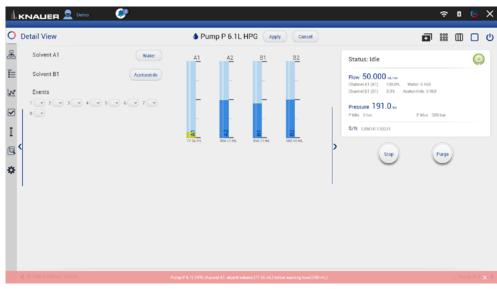




Fig. 5-38 Detail View of a pump showing the level indicator of Eluent Control

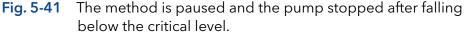


Fig. 5-39 System Overview of a pump showing the level indicator of Eluent Control









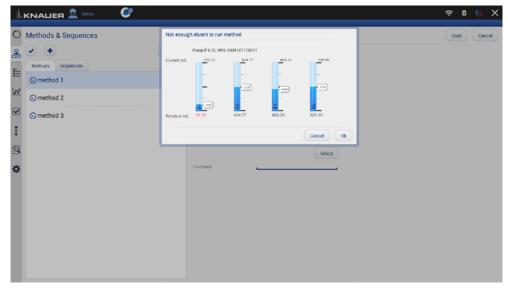
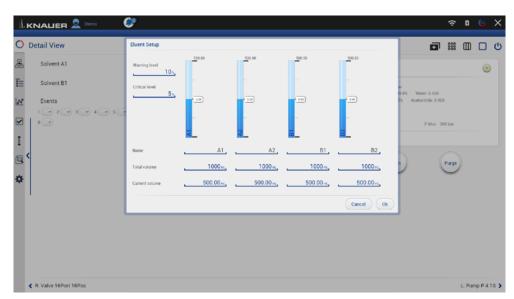


Fig. 5-42 A method is not started if there is too little eluent.





In the eluent control, the consumption of eluent is calculated based on the set flow rate and subtracted from the total volume of eluent set by the user. The eluent level is displayed graphically for each channel in the detail and system overview. If the level falls below a warning level, a permanent alert appears. If the level falls below a critical level, the method is paused, and pump delivery is stopped. Both limit values can be defined by the user. For each channel, which can be named separately, a total volume and a current volume can be specified. If the current volume is set in the Eluent Control Setup, which is reached by clicking on the level indicator, the difference between the current and the newly set volume is displayed on the side of each level indicator. A method is not started if there is too little eluent, and the user is informed by a message.



6. Methods & Sequences

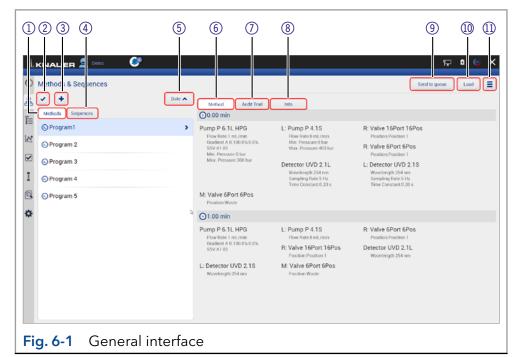
In this menu you can create your individual methods and add them up to a complete sequence.



Note: Mobile Control saves by default all result files in

C:\Mobile Control\Projects\Project folder*\Results\Queue_date_time. * The project folder is named default or can be renamed in Mobile Control settings > user management.

6.1 General interface



Legend

- ① Methods displays all methods.
- ② Multi select: Select several methods or sequences to edit, delete or export.
- ③ Add a method or sequence or import a method.
- ④ Sequences displays all sequences.
- (5) Sort methods or sequences by date or name.
- 6 Method: Shows time based commands of the method.
- ⑦ Audit Trial: Shows entries of the audit trial.
- (8) **Info**: Summarizes all method settings, activated auxiliary traces and system configuration.
- (9) Send to queue: sends the selected method or sequence in the run queue.
- (1) **Load** the selected method.
- Multi function button with more useful functions like preview, method editing, exporting...

Methods & Sequences				Send to	queue Load
 • 	Date 🔺	Method Audit Trail	Info		
Methods Sequences	A-Z	🕑 0.00 min			
🕓 Program1	Date	Pump P 6.1L HPG	Valve 6Port 2Pos	L: Pump P 4.1S	
S Program 2		Flow Rate:1 mL/min Gradgent A B:100.0%:0.0% SSV:A1 B1	Position Position 1	Flow Rate 0 mL/min Min. Pressure:0 bar Max. Pressure:400 bar	
🕓 Program 3		Min. Pressure:0 bar Max. Pressure:300 bar	M: Valve 6Port 6Pos Position Position 1	Detector UVD 2.1L Wavelength 254 nm Sampling Rate:5 Hz	
Program 4				Time Constant 0.20 s	
Program 5	>	R: Valve 6Port 6Pos Position,Waste			
		🕑 10.00 min			
		Pump P 6.1L HPG Flow Rate:1 mL/min	Valve 6Port 2Pos Position Position 1	L: Pump P 4.1S Flow Rate 0 mL/min	
		Gradient A B.0.0% 100 0% SSV:A1 B1	M: Valve 6Port 6Pos	Detector UVD 2.1L	
		R: Valve 6Port 6Pos Position Waste	Position Position 1	Wavelength 254 nm	



Methods can be sorted either in alphabetical order or by date of creation. Push the button a second time to change the order of methods.

Methods & Sequences					Send to queue	Load	
 ✓ + 	Date 🔺	Method Audit Trail	Info			Preview Edit	_
Methods Sequences		🕑 0.00 min				Delete	
🕟 Program 1		Pump P 6.1L HPG Flow Rate:1 mL/min Gradient A B:100.0%:0.0% SSV.A1 B1	Valve 6Port 2Pos Position Position 1	L: Pump P 4.1S Flow Rate 0 mL/min Min. Pressure:0 bar Max. Pressure:400 bar		Save As Export	
S Program 3		Min. Pressure:0 bar Max. Pressure:300 bar	M: Valve 6Port 6Pos Position Position 1	Detector UVD 2.1L Wavelength 254 nm Sampling Rate: 5 Hz			
 Program 4 Program 5 	>	R: Valve 6Port 6Pos Position.Waste		Time Constant 0.20 s			
		🕑 10.00 min					
	R: Valve 6Port 6Pos Position Waste Other Constant 0.20 s Position Waste Other Constant 0.20 s Position Position 1 Constant 0.20 s Constant 0.20 s Position Position 1 Constant 0.20 s Position Position 1 Constant 0.20 s Position Position 1 Position Position 1 Detector UVD 2.1L Position Position 1 M: Valve 6Port 6Pos Position Position 1 Position Position 1						
		R: Valve 6Port 6Pos Position Waste					

Fig. 6-3 Preview

By pushing "Preview" the first program line of all devices will be excecuted. This allows to check if all devices are running as expected or equilibrate the LC system. The maximum duration of preview run is 4 hours but can be stopped manually. Edit the selected method. Select several methods to edit, delete or export them.

Legend

- Add method: Create your own method and edit all settings.
- ② Add sequence: Create a sequence by adding methods.

3 Import:

Import Mobile Control methods. Data format is *mcp.

i

	S .			두 🏻 😔
Methods & Sequences	Date 🔺	Method Audit Trail	Info	Send to guese Load
Methc Add method		🕑 0.00 min		
Pr. Dimport Program 2 O Program 3	J	Pump P 6.1L HPG Flow Rate 1 mL/man Gradient A 6 100 0% 0.0% SSV A1 B1 Min. Pressure 0 bar Mox. Pressure 300 bar	Valve 6Port 2Pos Position Position 1 M: Valve 6Port 6Pos Position Position 1	L: Pump P 4.1S Flow Rate 0 mit Jmm Mm. Pressure 0 bar Mair. Pressure 400 bar Detector UVU D 2.1L Werelength 254 nm Samding Rete 3 Hz
Program 4				Time Constant 0.20 s
Program 5	>	R: Valve 6Port 6Pos Position.Waste		
¢		(©10.00 min		
		Pump P 6.1L HPG Flow Rate:1 mL/min Gradient A 8:0.0%:100.0% SSV:A1 B1 R: Valve 6Port 6Pos	Valve 6Port 2Pos Position Position 1 M: Valve 6Port 6Pos Position Position 1	L: Pump P 4.1S Flow Rate 0 mJ/min Detector UVD 2.1L Wavelength 254 ms
		Position Waste		

Note: If you import a method from another Mobile Control, ensure that the configuration of your system is identical.

6.2 Add a method

Process

- **1.** Go to Methods & Sequences.
- 2. Select <+> and tap "Add method".

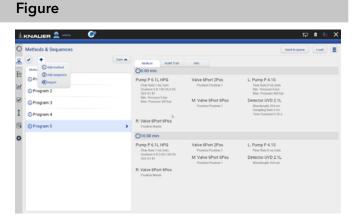
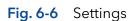
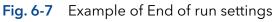


Fig. 6-5 Add a method

 Image: Stand Method > Add Method Campid: 1
 Image: Stand Particle Particle



O Methods > Add Metho	d Example 1		Save Close
Settings Duret	velocity Sample Injection Detection Fraction Collection		
	Waiting for trigger		
	Waiting for temperature		
e.	Skip autosampler injection		
End Of Run Settings			
	Standby	*	
1	Flow off	8	
6	Lamp(u) off		
Auxiliary Traces			
Pump P 6 1L LPG	Pump P.6.%, UPG - Pressure	×	
Autosampler AS 6.1L	Autosamples AS 5.1% - Tray Temperature	~	
Yahe SPart 2Pos	Value SPort 2Pos - Problem	~	
Delector DAD 6.15	Detector DHD 5.1L - Lamp Temperature	~	
Frae, Collector Fory 81	Frac. Collector Forg R1 - Position	~	
Reports			
	System Configuration		



١	Methods & Sequences					Send to queue	Load	
5	• •	Date A	Method Audit Trail	Info				
	Methods Sequences		()0.00 min					
	O Program1		Pump P 6.1L LPG Flow Rate 1 mil/min	Autosampler AS 6.1L Injection Type Partial Loopfill	Valve 6Port 2Pos Position Position 1			
	O Program 2		Gradient 100 (% 0 D% 0 D% 0 D% 0 D% Min. Pressure 0 bar Max. Pressure 300 bar	Syringe Speed Normal Syringe Speed Scale 5 Wash Times 3	Detector DAD 6.11 Wavelength 1:254 n			
1	O Program 3		Mail: Pressant run sar	Flash Valame 20 pl. Biordi Gordi - Hogh 2.5 mm Biordi Ar Segment Off Biordi Headquer Pressure Off Biolde Transport Valame 1 Biolde Sample Sample	Wavelength 2.254 nm Wavelength 3.254 nm Wavelength 3.254 nm			
	C Program 4				Bandwidth 1.8 nm Bandwidth 2.8 nm Bandwidth 3.8 nm Bandwidth 4.8 nm Sampling Rate 5 Hz			
1	O Program 5							
×	S Example 1		Frac. Collector Foxy R1 Position Waste		Tene Constant 0.29 r			
			⊙10.00 min					
			Pump P 6.1L LPG Flow Rate 1 mL/min Gradient 100.0% 0 D% 0 D% 0 D%	Valve 6Port 2Pos Position:Position 1	Detector DAD 6.1L Wavelength 1.254 nm Wavelength 2.254 nm Wavelength 3.254 nm Wavelength 4.254 nm			
			Frac. Collector Foxy R1 Position Wastle					

Fig. 6-8 Method - overview

- 3. Name your method.
- **4.** Begin with "Settings" and set all required parameters according to chapter 6.4 until 6.8 for correct adjustment.
- 5. Confirm your settings with <Save>.
- 6. By pressing the button <Close> you will be directed to the overview page.

Note: Special characters are not supported in the method name.

You can program an automatically stop of pump and lamp of the detector after finished measurement. Scroll down to END OF RUN SETTINGS and activate the required checkboxes.

7. Confirm your settings with <Save>.



1

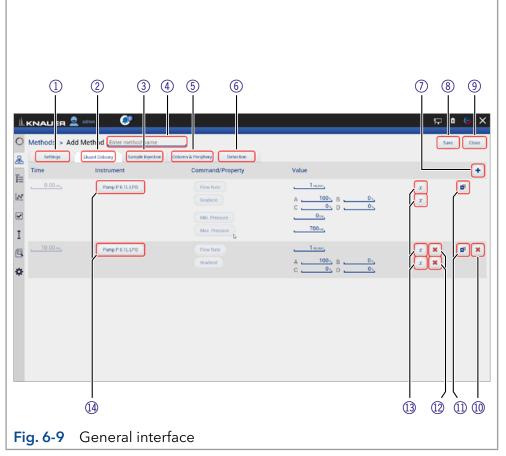
Note: In a series of methods we recommend to deactivate the checkboxes for switching off the flow and lamp in "End of run settings". Only for the last method the end of run settings are activated.

- **8.** In the method overview all methods are listed. The detailed commands of each method are shown.
- **9.** If you want to change the method, select <Edit> in the upper right menu.
- **10.** To start the method, refer to chapter 6.11.

6.3 Method interface

Legend

- Settings (refer to chapter 6.4)
- 2 Eluent Delivery (refer to chapter 6.5)
- (3) Sample Injection (refer to chapter 6.6)
- ④ Name the method
- (5) Detection (refer to chapter 6.7)
- 6 Fraction Collection (refer to chapter 6.8)
- Save the method
- (8) End input without saving
- ④ Add a method line, it is always a copy of the previous line.
- 1 Delete whole method line
- Add a command/property
- (2) Delete method parameter
- (3) Set a variable for the method parameter
- 🚯 Select an instrument



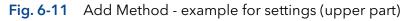
Pump P 2.11. L FREETON KNALIER 2 ad Methods > Add Me	min 😍	Valve 6Post 6Pos Parascrates	Thermostat CT 2.1 FCC211816877	Detector 500 oxu25x38281	a 📀
		(87) I	(2)	Ð	
Methods > Add Me	athod Enter method name				
Methods > Add Mi				San	ve Clo
Settings E)	uent Delivery Sample Injection	Column & Periphery Detection		240	
Time	Instrument	Command/Property	Value		6
	Pump P 6.1L LPG		1.com		đ
	(and the second		A, 100s, B, 0s,	x	(BC)
			C0x D0x		
		Min. Pressure	0		
		Max. Pressure			
	Pump P 6.1L LPG	Flow Rate		x	61
		Gradient	A100 M B0 M C0 D0 M	x	

Fig. 6-10 Arrangement of the device components

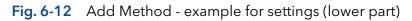
Practical tip: For easier handling, all device components in the menu "Methods" are arranged in the same way as the tabs in menu "System Overview".

6.4 Settings

L.	KNALLER 👤 admin			두 🛚 🕤 X
D	Methods > Add Method Enter	method name		Save Close
2	Settings Eluent Delivery	Sample Injection Column & Periphery Detection		
	General	Run Time	10 min	
4	Start Of Run Settings	Autozero at start		
		Warting for trigger		
[Waiting for temperature		
3		Skip autosampler injection		
¥	End Of Run Settings			
		Standby		
		Flow off		
		Lamp(s) off		
	Auxiliary Traces			
	Pump P 6.1L LPG	Pump P 6.1L LPG - Pressure	✓ ^b	
	Valve 5Port 2Pos	Valve 6Port 2Pos - Position	✓	
	Thermostat CT 2.1	Thermostat CT 2.1 - Temperature	~	



⊋ ∎ ⊜ X
Save Close



Start of run settings	
Autozero at start	Performs an autozero at the start of the method if activated.
Waiting for trigger	Starts the run not until a signal was sent from an external device e.g. injection valve.
Waiting for temperature	Starts the run not until a defined temperature is reached. Start temperature can be defined in the column thermostat CT 2.1 or in the RI detector RID 2.1L.
Skip autosampler injection	The method is carried out without the injection step of the autosampler.
End of run settings	
Standby	All devices go in standby mode after the run.

Flow	off	Flow of the pump is automatically switched off after the run.
Lamp	o(s) off	Lamp of the detector is automatically switched off after the run.
Auxiliary tra	ces (not availa	able in Display License)
Auto	sampler - Tem	perature
Colu	mn Thermosta	at - Temperature
	ctor (AZURA® perature	RID 2.1L, DAD 2.1L/6.1L, MWD 2.1L) -
Pump	o - Pressure, Fl	ow rate in isobar/constant pressure mode
Valve	e - Position	
Reports		
Syste Conf	em iguration	Choose the components, which should be displayed in the system report.
Meth	iod	
Syste	em logs	
Resu	lts	
Ex ports		
Data	Rate traces	Export the signal and auxiliary traces as value
XY tra	aces	of the signal strung together or as a pair of time and signal value. The chromatogram is
HTM	Lgraph	exported as html file.
Fraction coll	ection	
Signa	al	fraction collection relevant method settings
Flow		(see chapter 13.1.2)
After	last vial	
Rese	t rack on start	
Integration p	parameters (n	ot available in Display License)
Integ	ration off	Activate the checkbox to edit integration parameters.
Nega	ative Peaks	
Tresh	old	
Widt	h	
Minir	num area	

6.5 Eluent Delivery

Legend

- Time Enter point of time
- ② Instrument Select device
- ③ **Command/Property** Select parameter
- ④ Value Enter value

	edmin C Method , Enter in sthod name	3		Save Close
S ttings	Eluent Delivery Sample Injection	Column & Peripher Detection		save
Time	Instrument	Comm ind/Property	Value	+
	Pump P 61LLPG	Flow Rate Gradient Min. Pressure	A <u>100</u> , B <u>0</u> , C <u>0</u> , D <u>0</u> ,	x x
I		Max. Pressure	<u>. 700 m</u> ,	
₫ <u>10.00</u> ~	Pump P 61LLPG	Flow Rate Gradient	1AB A100_5_B05_ C05_D05_	х В х
Fig 6-13	Methods - F	Example for Sam	nle Injection	

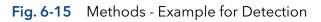
6.6 Sample Injection

Settings	Eluent Delivery Sample Injection	Detection Fraction Collection		
Time	Instrument	Command/Property	Value	
0.00	Autosampler AS 6 IL	Injection Type Syninge Speed Swinge Speed Scale Wash Times Flash Volume Needle Height Air Segment Heidigage Pressure Transport Volume	Partial Loopfill Normal 5 1 30 ss, 20 0ff 0n 0ff 0n None	đ
	Valve 6Port 2Pos	Position	1 2	x
<u>0.10m</u> x	Valve 6Port 2Pos	Position	1.2	x × ø
10.00mm	Valve 6Port 2Pos	Position	1 2	x

Fig. 6-14 Methods - Example for Sample Injection

6.7 Detection

	d Method Program 5			Save
Settings	Eluent Delivery Sample Injection	Detection Fraction Collection Command/Property	Value	
0.00 min_	Detector DAD 6.1L	Wavelength 1	254	<u>x</u>
		Wavelength 2	254==,	x x x
		Wavelength 3	254	x
		Wavelength 4	254mm	x
		Bandwidth 1	8m,	
		Bandwidth 2	8	4
		Bandwidth 3	8	
1		Bandwidth 4	8.m.	
		Sampling Rate	5 Hz	
		Time Constant	0.20 s	
10.00mm	Detector DAD 6.1L	Wavelength 1	254==,	x Ø
			254m,	



6.8 Fraction Collection

1

Note: Only one multiposition valve or a fraction collector can be addressed for fraction collection. Cascading of several valves is not supported.

Settings Elant University Sample layection Detection Fraction Collector Time Instrument Command/Property Value 0.00ms Frac Collector Fory R1 Pointon Waste 10.00ms Frac Collector Fory R1 Pointon Waste	ø ø
Volate Frac Collector Foxy R1 Position Waste Volate Trac. Collector Foxy R1 Position Waste Volate Vo	
10.00++s Frac Collector Fory IN Fostion Waste	ø
4	

Fig. 6-16 Methods - Example for Fraction Collection

6.9 Export and import methods



Note: Only methods can be exported or imported. The function does not support sequences. Only exchange methods between systems with the same system configuration.

Process

Export

- **1.** Go to METHODS & SEQUENCES and choose the tab "Methods".
- 2. Select the method to be exported and tap <Export> in the upper right menu.



Note: To export more than one method refer to chapter 6.10.

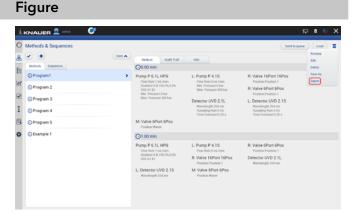


Fig. 6-17 Exporting a method

3. The method is exported and saved in C:\Mobile Control\Export:

	Date A	Method Audit Trail	Info		
Methods Sequences		00.00 min			
© Program 1 © Program 2 © Program 3 © Program 4 © Program 5	>	Pump P 6.1L HPG Flow Rate 1 mil/mm Guideert A 810 O'R. O'N SDV A1 83 Mm. Pressure 300 har Mm. Pressure 300 har MM. Vallve 6/Port. 6/Pos Position Waste	L: Pump P 4.15 Flow Rote I mL/non May Pressure 3 for Max Pressure 40 bar Detector UVD 2.1L Histories/J; 24 Am Sampling Time 5 for Tame Constant 0.20 s	R: Valve 14Port 14Por Poston Poston 1 R: Valve 6Port 5Pos Proston Poston 1 L: Oetector U/O 2.15 Stephen (bit 5 to 10 Stephen (bit 5 to 10 Time Constant 0.20 s	b
S Example 1		⊙1.00 min			
		Pump P 6.1L HPG Flow Rate 1 mL/mm Gudent R 100 Ph.0 Ph SSVAI B1 L: Detector UVD 2.1S Wassingth 254 cm	L: Pump P 4.1S Flow Relat 5 mJ/min R: Valve 16Port 16Pos Position Pusation 1 M: Valve 6Port 6Pos Position: Winder	R: Valve 6Port 6Pos Pratice Position 1 Detector UVD 2.1L Marelength 254 nm	

Fig. 6-18 Exporting one method

Process

Import

By selecting more than one program several programs can be imported.

- **1.** Go to METHODS & SEQUENCES and choose the tab "Methods".
- 2. Tap <+> and choose <Import>.

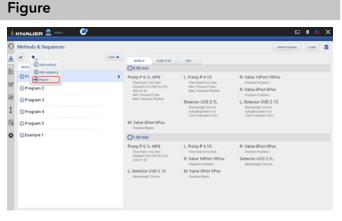


Fig. 6-19 Importing a program

Process

3. A folder opens. Select the method or several methods to be imported.

Figure

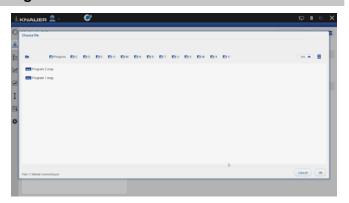


Fig. 6-20 Choosing a file

4. The methods are imported.

)	Methods & Sequences				Send to queue	Last	
L	 • 	Date 🔺	Method Audit Trail	anto -			
1	Methods Sequences		()0.00 min				
1	Program1	-	Pump P 6.1L HPG Flow Rate 1 mL/min	L: Pump P 4.1S Flow Rate Bird, Inte	R: Valve 16Port 16Pos Position Position 1		
č	© Program ₽		Flow Hate 1 mL/min Gradient A B 100 0% 0 0% SSV A1 B1	Flow Rate 3 mL/min Min. Pressure 3 bar Max. Pressure 400 bar	Position Position 1 R: Valve 6Port 6Pos		
3	S Program 4		Max. Pressure 0 bar Max. Pressure 300 bar	Detector UVD 2.1L	Position Position 1 L: Detector UVD 2.15		
	Program 5			Wavelength 254 nm Sampling Pate 5 Hz Time Constant 0.20 s	Wavelength 254 nm Sampling Rate 5 Hz Time Constant 0.20 s		
2	© Example 1		M: Valve 6Port 6Pos Position Waste	Table Company of 20 %	Table Consume 0 20 S		
ł			(01.00 min				
			Pump P 6.1L HPG	L: Pump P 4.1S	R: Valve 6Port 6Pos		
			Gradient A B 100 Ph.0.0% SSV A1 B1	R: Valve 16Port 16Pos Position Position 1	Detector UVD 2.1L Wavelength 254 nm		
			L: Detector UVD 2.15 Wavelength 254 nm	M: Valve 6Port 6Pos Position/Wanter			
L							

Fig. 6-21 Importing several programs

6.10 Edit, export or delete multiple methods

With this feature you can select several methods to export, delete or edit them. The multiple editing function avoids time-consuming editing of each individual method. Consider that only time points which are equal in all selected methods can be changed.

Do not apply edit multiple for running methods. Use this function for example to adjust fraction collection to a shifted retention time of the target peak. The time point of switching the fraction collection valve can be adjusted in all desired methods.

Device parameters like valve position, flow rate or wavelength cannot be changed.



Note: Editing the first and last line of multiple methods is not supported.

Figure

Process

Edit multiple programs

- **1.** Go to METHODS & SEQUENCES and choose the tab "Methods".
- 2. Tap the multi select button v to selcet multiple methods.

Methods & Sequences	Date A			Ede	Delete Dipor
Methods Sequences	(00.00 m		into		
OProgram1 OProgram 2 OProgram 4 OProgram 5 OProgram 5	Gradeett SSV A1 Min. Pre Max. Pre	e 1 mL/min A B 100 Ch 0 Oh 8 ssare 0 har ssare 2 har ssare 300 har 6Port 6Pos Waste	L: Pump P 4.15 Flow Ratel in L/tem Min. Pressure that Min. Pressure 400 har Detector UVD 2.1L Washingship34 am Sampling Data 5 fit Tane Constant 0.20 s	R: Valve 16Port 16Pos Position Position 1 R: Valve 6Port 6Pos Position Position 1 L: Detector U/VD 2.15 Wavelengt 24 on Sampling Sate 5 to Time Constant 0.20 s	
	Gradeett SSV AT B	e 1 mL/min A 8: 100.0% 0.0%	L: Pump P 4.15 Flow Refe I int/New R: Valve 16Port 16Pos Postikor Votation 1 M: Valve 6Port 6Pos Position Wester	R: Valve SPort SPos Position Position 1 Detector UVD 2.1L Minerelength 254 nm	

Fig. 6-22 Select multiple methods

3. Select several methods that you want to edit and press <Edit>.

0	Methods & Sequences				Ede	Delete Export
8		Date 🔺	Method Audit Trail	anto .		
Ē	Methods Sequences		0.00 min			
	© Program1	*	Pump P 6.1L HPG Flow Rate 1 mL/min	L: Pump P 4.1S Flow Rate I mL/min	R: Valve 16Port 16Pos Position Position 1	
2	© Program 2		Filow Rate 1 Inc., man Gradewar & 100 On On SSV A1 83 Mm, Pressure 300 bar Man, Pressure 300 bar	Min, Pressure 3 bar Max, Pressure 3 bar Max, Pressure 400 bar	Poston Poston 1 R: Valve 6Port 6Pos Poston Position 1	
2	C Program 4	5		Detector UVD 2.1L	L: Detector UVD 2.1S	
I	Program 5	0		Wavelength 254 nm Sampling Rate 5 Hz Time Constant 0.20 s	Wavelength 254 nm Sampling Rate 5 Hz Time Constant 0 20 s	
8			M: Valve 6Port 6Pos Position Waste			
¢			(01.00 min			
			Pump P 6.1L HPG Flow Rate 1 mL/min	L: Pump P 4.1S Flow Rate II mL/min	R: Valve 6Port 6Pos Position Position 1	
			Gradient A B. 100.0%, 0.0% SSV A1 B1	R: Valve 16Port 16Pos Position Position 1	Detector UVD 2.1L Wavelength 254 nm	
			L: Detector UVD 2.1S Wavelength 254 nm	M: Valve 6Port 6Pos Position Waster		

4. To select the insruments you want to edit tap <All instruments>.

Fig. 6-23 Edit multiple methods

g Time Istatument Command/Property New Value 1 0.00 min fit command. fit	
2 1.00 min Latendarium 1.00 min 1.00 min 3 2.00 min Latendarium 1.00 min 1.00 min 4 3.00 min Latendarium 1.00 min 1.00 min	
2 1.00 min 44 monuments Tore 1.00 m. 3 2.00 min 44 monuments Tore 2.00 m. 4 3.00 min 44 monuments Tore 0	
3 2.00 min At instances 100 2.00 min 4 3.00 min At instances 100 100	
4 3.00 mm Alternations	
I s 7.50 min At instruments	
9	
¢	

Fig. 6-24 Select instruments



Figure

Process

6. Change the time of the program line you want to adjust. If you enter a suffix the program will be copied with program name + suffix. If nothing is entered the program is overwritten.

7. Confirm your settings with <Save>.

			<u>n</u>	
	Time	Instrument	Command/Property	New Value
1	0.00 min	All instruments	Time	
2	1.00 min	All instruments	- Text	1.00
3	2.00 min	All instruments	Tane	s.cd
4	3.00 min	Al instruments	(100)	
5	7.50 min	Al instruments	Time	7.50

Fig. 6-26 Enter a suffix and adjust the time

- Image: Second Second
- **8.** The methods with modified time points have been saved as a copy with the filename + suffix.

Fig. 6-27 Updating

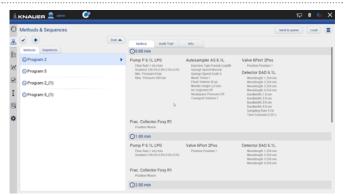
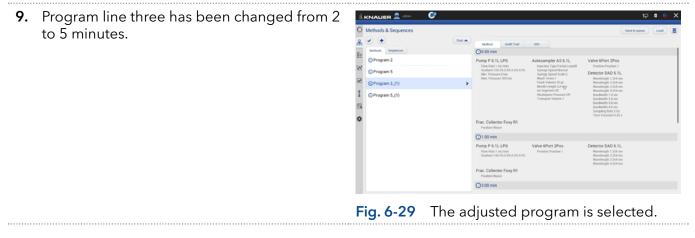


Fig. 6-28 The original method is selected.



Process

Delete multiple programs

- **1.** Go to METHODS & SEQUENCES and choose the tab "Methods".
- 2. Tap the upper right menu and choose <Select>.
- 3. Select the programs you want to delete.
- 4. Press <Delete>.



Note: Export of several programs works the same way. Instead of delete use the export button.

5. Confirm your selection with <Ok>.



Impact S Sequences Impact Sequenc

Fig. 6-30 Delete multiple programs

1 KNAL	ER 👤 💕					₽ * 6 X
O Method	s & Sequences		Delete method			Edit Delete Export
& 🕗 🔹	Sequences	Date 🔺	Are you sure you want to selected methods?	delete all		
	ram 2			anor) (0) 5 6.1L	Valve 6Port 2Pos	
	ram 5		Gradient 100 0% 0.0% 0.0% Min. Pressure 0 bar	Ingention Type Partial Loophil Syringe Speed Normal Syringe Speed Scale 5	Prototo Poution 1 Detector (PAD 6.1L Hisroeting) 1.254 Am Hisroeting) 2.254 Am Hisroeting) 2.254 Am Hisroeting) 6.254 am Handwolft 8.25 am Handwolft 3.0 cm Handwolft 3.0 cm Handwolft 8.0 cm Sampling Ref. 5142 Time Constant 0.226 s	
	ram 2_(1)	>	Max. Pressure 300 bar	Wash Times 1 Flush Volume 30 pl. Needle Height 2,0 mm		
	ram 5_(1)			Ait Sogneard Off Headspace Pressure Off Transport Volume 1		
ß						
¢		Frac. Collector Foxy R1 Position Waste				I
			©1.00 min			
			Pump P 6.1L LPG Flow Rate 1 mL/min Gradient 100 PL 0 D1 0 D1 0 D1	Valve 6Port 2Pos Position:Position 1	Detector DAD 6.1L Wavelength 1.254 nm Wavelength 2.254 nm Wavelength 3.254 nm Wavelength 4.254 nm	
			Frac. Collector Foxy R1 Position Waste			
			©3.00 min			

6. The selected programs have been deleted.

Fig. 6-31 Confirm selection

	Date 🔺	Method Audit Tool	and o		
Methods Sequences		00.00 min			
Indexta logarous OProgram 2	>	Pump P 6.1L LPG File Rear Ted Yean Mar. Pressure Dar Mar. Pressure 300 ber Frac. Collector Foxy R11 Publick Waste	Autosampler AS 6.1L Instituto Type Parial (copilit Syrings Speed Monital Syrings Speed Scale 5 Mark Vision 5 op 6 Head Vision 5 op 6 Head Hogitz 22 mm Ait Soymer 10 Headquare Pressure 01 Transport Visione 1	Valve 6Port 2Pos Pratos Position 1 Detector DAD 6:11 Workength 1:24 am Workength 2:24 am Workength 4:24 am Rodwards 1 is an Rodwards 1 is an Rodwards 1 is an Rodwards 2 is an R	
		©1.00 min			
		Pump P 6.1L LPG Flow Rate 1 mL/min Gradient 100 0% 0 0% 0 0% 0 0%	Valve 6Port 2Pos Position:Position 1	Detector DAD 6.1L Wavelength 1.254 nm Wavelength 3.254 nm Wavelength 3.254 nm Wavelength 4.254 nm	
		Method Program 2,(1) was Method Program 1 was d Method Program 5,(1) was			

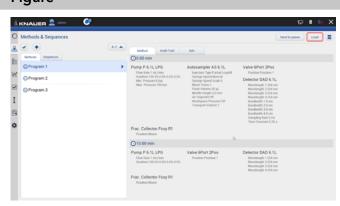
6.11 Start a method

6.11.1 Starting a single method

Process

Figure

- 1. Go to Methods & Sequences and choose the tab "Methods".
- 2. Press <Load>.



- **3.** By clicking you will be directed to a new tab with input fields to enter a sample ID, file name and comment. All entries are saved in the result file and part of the report.
- 4. Select <Suffix> to name the measurement.
- 5. Select the subfolder which was created in Settings/User Management

0	Methods & Sequences					Start Cancel
\$	 • 	AZ 🔺				
Ē	Methods Sequences		Column	No Column		
	O Program 1	•	Start Options			
Z	O Program 2		Sample ID.	Sutta		
2	O Program 3		File Name:			
I				Sutter		
			Satator .		D.	
9				Select		
¢			Autosampler Options			
			Vot	n/a		
			Injection Volume:	5		

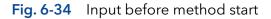


Fig. 6-33 Load the method

You can choose between:

- Increment Number
- User Name
- Method Name
- Instrument Name
- Date and Time

We recommend to choose "Method Name" and "Date and Time".

- 6. Confirm your selection with <Ok>.
- 7. Select <Filename> to name the file.

To avoid same filename, naming of the run must be individually. We recommend to choose "Method Name" and "Date and Time".

8. Confirm your selection with <Ok>.

		C 0 0 C
Methods & Sequences	All and the second seco	(Bot) Coor

Fig. 6-35 Input for sample ID

Methods & Sequences		Suffix		Start Carce
	AZ 🔺	increment Number		
Methods Sequences		User Name	204mm	
© Program 1	>	Instrument Name		
Program 2		Date and Time	Sum.	
Program 3		Sample D		
(Gringhand			set ga	
		Salate		
9			Select	
\$		Autosampler Options		
		Vot	Na	
		Injection Volume:	54	

Fig. 6-36 Naming the method

- If you select <Start>, a new time bar is shown on the upper part of the screen. It shows the name of the method and the progress of the run.
- **10.** You can abort the run by pressing <Stop>.

	Resume Waste	Collect (1) Next (2)	
			-
6			
4	6 6		16
	b		

11. The method is send to the run queue. For more information refer to chapter 7.

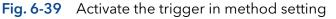
Fig. 6-37 Start the run

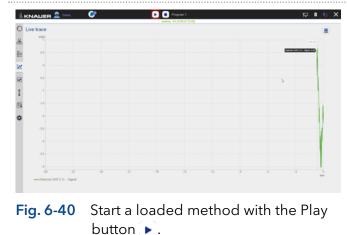
ıi.	KNALLER 👤 🚥	۲			Program 1 reming W. (0.90 of 10.00)		- 🖓 🖣 🖓 🕽
0	Queue : 00.09:05					Stop queue Pa	ne queue
8	Progress History						
h	# Name	Type	State	Duration	File Name	Sample ID	Actions
z	1 Enogram.1	Method	Durning	9.30	Program 1,2022.10.11,09-37-30	Program 1, 2022 10 11, 09-37-30	E Stop
2							
I							
9			6				
¢							

12. If you set a start with external trigger, measurement starts if you press the Play button
or by release of the signal from a device (e.g. release of manual injection valve).

Fig. 6-38 Method in run queue

	Methods > Add Method Program 1			Save Close
Ł.		de Injection Column & Perighery Detection Fraction Col	lection	
8	General	But Take	10 min	
e.	Start Of Run Settings	Þ		
		Autopero at start		
		Waiting for trigger	v	
I		Waiting for temperature		
6		Skp autosampler injection		
*	End Of Run Settings			
۴		Standby		
		Flow off		
		Lampiù eff		
	Auxiliary Traces			
	Pump IP 6.1L HIPG	Pump P.5.1L HPG - Pressure	~	





6.11.2 Starting several programs/sequences

Figure

Process

- 1. Go to METHODS & SEQUENCES and choose the tab "Methods" or "Sequences"
- 2. Choose the program or the sequence.
- **3.** Select <Send to queue>.

0	Methods & Sequences	#2 A			Send to querue
\$	 • 	N2 0	Method Audit Trail	anto .	
Ē	Methods Sequences		0.00 min		
2	O Program 1	>	Pump P 6.1L, HPG Rev Rat 1 nL/nm Guiden A 810 On 0 th SIYA 181 D Min Pressure Tah Man Pressure Tah Man Pressure Tah Man Pressure Tah Man Pressure Tah Man Pressure Tah	L: Pump P 4.1S Flow Rate I mi./min	R: Valve 16Port 16Pos Position Position 1
2				Min. Pressure 0 bar Max. Pressure 400 bar	R: Valve 6Port 6Pos Position Position 1
I				Detector UVD 2.1L Wavelength 254 nm Sampling Rate 5 Hz Time-Constant 0.20 s	L: Detector UVD 2.15 Mavelength 254 nm Sampling Tutor 5 Hr Time Constant 0.29 s
8					
¢			⊙10.00 min		
			Pump P 6.1L HPG Flow Rate 1 mL/mm Gradient A B 100 D% 0 D% SSV A1 B1	L: Pump P 4.1S Flow Rate I mL/mm	R: Valve 16Port 16Pos Position Position 1
				R: Valve 6Port 6Pos Position Position 1	Detector UVD 2.1L Wavelength 254 nm
			L: Detector UVD 2.15 Wasslength 254 nm	M: Valve 6Port 6Pos Position Weste	

Fig. 6-41 Send a method or sequence into the run queue

4. If you select <Send to queue> you have two further options:

a) <Send with high priority> means the sequence will start at first or next if a method is already running.

b) <Send to the end> means the sequence is inserted at the last position of the run RUN QUEUE.

- 5. Select the menu RUN QUEUE which shows a list of all added methods and sequences. You can delete or rearange the order of methods/sequences.
- 6. Press <Start queue> to start the run.

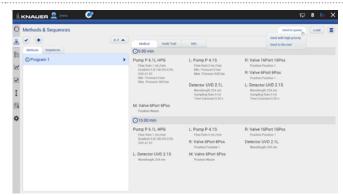


Fig. 6-42 Further options

Que	ue:00:30:00					Start quarue	Passe quese
1	Name	Туре	State	Duration	File Name	Sample ID	Actions
1	Program.1	Method	O Pending	10.00			· + •
2	Program.1	Method	O Pending	10.00			≡t 4 ¥
3	Doyum1	Method	Pendeq	10.00	8	80	et x



- Image: Image:
- If you select <Start>, a new time bar is shown on the upper part of the screen. It shows the name of the program and the progress of the run.
- 8. You can abort the run by pressing <Stop>.

9. After the successful run, a status message is shown. If reporting is selected in method settings, a second status which shows the report file name, links to the pdf file.

If ASCII export is selected, a third status links to the csv file.

		: 00:02:00								
	Queue	00.02.00						Stop-queue Pause q	Ciese of	
\$	Progre									
Ē.		Name	Type	State	Duration	File Name		Sample ID	Actions	
N.	1	Program.1	Method	Ohunning	0.01	Program 1,2022.10.11,10-38-43		Program 1, 2022 10 11, 10-38-43	III (344	
2	2	Program.1	Method	O Pending	1.00				· · · · ·	×
I	3	Doyum.1	Method	0 Pending	1.00				🖂 t	×
9										
¢										
							D.			
					lie Program 1.20	221011.1030-4116 is ready. Ock here!	o open file location.			×

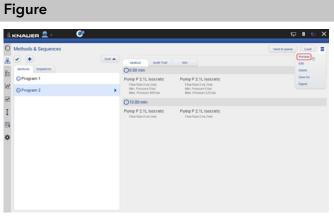
Fig. 6-45 Method is finished and status lines are shown.

6.11.3 Preview run

Process

Preview run

- 1. In the preview run the first program line of all devices will be executed. This allows to check if all devices are running as expected to equilibrate the system. The maximum duration of preview run is 4 hours infinite time and must be stopped manually. During a preview run signals from detectors or auxiliary traces will be acquired.
- 2. The result file is stored in C:\Mobile Control\ Projects\Default\Results\preview_run.h5 and is overwritten with every started preview run.





0	Methods & Sequences				Send to queue	-
8	 • 	AZ .	Method Audit Trail	lado		
Ē	Methods Sequences		00.00 min			
=	O Program 1		Pump P 6.1L HPG	L: Pump P 4.1S	R: Valve 16Port 16Pos	
N.	O Program 2	,	Flow Rate 1 mL/min Gradient A B 100 0% 0 0%	Flow Rate 3 mi,/min Min. Pressure 3 bar	Position Position 1	
2	Girlogram 2		SSV A1 81 Min. Pressure 0 bar	Max. Pressure 400 bar	R: Valve 6Port 6Pos Position Position 2	
~			Max. Pressure 300 bar	Detector UVD 2.1L	L: Detector UVD 2.1S	
I				Wavelength 254 nm Sampling Rate 5 Hz	Wavelength 254 nm Sampling Rate 5 Hz	
22			M: Valve 6Port 6Pos	Time Constant 0.20 sQ	Time Constant 0.20 s	
3			Position Waste			
¢			(0.10 min			
			R: Valve 16Port 16Pos Position Position 2	R: Valve 6Port 6Pos Position Position 3	M: Valve 6Port 6Pos Position Collect to 1	
			(0.20 min			
			R: Valve 16Port 16Pos Position Position 3	R: Valve 6Port 6Pos Position Position 4	M: Valve 6Port 6Pos Position Collect to 4	
			0.30 min			
			M: Valve 6Port 6Pos Position/Next			
			On the sale			

6.12 Audit trial

Process

The audit trial records all changes in methods/ sequences. A list summarizes all altered commands by a user with a timestamp. The audit trial can be activated in the settings of Mobile Control (refer to chapter 12.1.4 Preferences).

If you press <Method> you return to the window with Methods and Sequences.

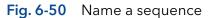
Figure

Methods & Sequences					Send to gunue Load
 • 	A-2 🗸	Meth	od Audit Trail	otel	
Methods Sequences		User	Logged	Source	Activity
O Program 7		admin	13.10.2022, 15.05.17	P 2.1L, UVD 2.15	New method created
O Program 6		admin	13.10.2022, 15.06.01	P21LWP215	3 litre(s) added Psun time (main) of line 2 changed from 18:00 to 0.10 For instrument Detector UVD 2.15 at line 2 Wavelength: 254 nm deleted
O Program 5					
Program 4					
O Program 3					
O Program 2					
O Program 1					
() example 4					
example 3					
🕞 example 2					

Fig. 6-48 Audit trial

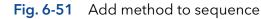
6.13 Add a sequence

Process	Figure
 Go to METHODS & SEQUENCES. Select <+> and tap "Add a sequence". 	
 Name your sequence. Click on the <+> Add method to choose one of the existing methods. Further you can add the sample ID, file name, a comment or set the number of repetitions. 	



- 5. Select the method you want to run first. You can change the order of methods also at the end.
- **6.** Confirm with <Ok>.

0	Add method to sequence	Select method	Save Cancel
&	Method	Program 1	
	Metrod Select metro	Program 2 Program 3	
2	Column type No Colum	m Orogan 4	
	Repetitions per visit	1 Canol (A	
•	Sample D		
1	File Name		
9			
¢	54MARC	- -	
	Connent	_	



- 7. Tap <No Column> and select a column from the list.
- 8. Confirm with <Ok>.

9.	Name th	e Samr	le-ID ai	nd select	<suffix></suffix>

11. Name the Filename and select <Suffix>.

You can choose between: Increment Number

- You can choose between:
- Increment Number
- User Name
- Method Name
- Instrument Name
- Date and Time
- **10.** Confirm with <Ok>.

User Name
Method Name
Instrument Name
Date and Time

Sample-ID12. Confirm with <Ok>.

Fig. 6-52 Select a column

Fig. 6-53 Sample ID

- Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence

 Image: Contract of the sequence
 Image: Contract of the sequence
 - Fig. 6-54 Naming the method



13. Tab <Subfolder> to select a subfolder.



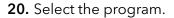
Fig. 6-55 Select a subfolder

- 14. Select the repetitions per vial.
- **15.** Confirm your settings with <Save>. You will be directed to a new window.

0	Add method to sequ	nce	Save Cancel
&	Method		
Ē≣	Method	Program 1	
\mathbb{N}^{1}	Column-type Repetitions per vial	Ni Column	
	Start Options Sample ID:		
I	File Name		
¢	Sublater.	Taler	
	Comment		

16. A list summarizes all programs the sequences.

- **17.** Click on the pen symbol to edit the sequence. Click on the red cross to delete the program.
- **18.** Press <Save> to save the sequence.
- **19.** Select the <+> symbol to add the next program. Add the next program.



21. Proceed in the same way as done with first program (Sample naming).

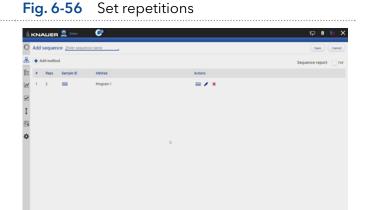


Fig. 6-57 Overview of sequence

il.			
0	Add method to sequence	Select method	Save Cancel
8	Method	Program 1 Program 2	
Ē	Method	rhod Program 3	
12		Arms Program 4	
	Repetitions per stal Start Options	Cased (8)	
×	Sample II		
I	Tin Name	iona -	
8		uma	
¢	Salar		
		ident	
		—	



- 22. You see both programs in the list.
- **23.** You can change the order by selecting the arrow on the right side of each row.
- **24.** Activate the check box PDF to create a sequence report.

1k.	ĸN	AUER	👤 Demo	<u>e</u>		F • G :
0	Add	sequer	ce <u>Enter seque</u>	nce name		Save Cancel
&	+/	dd metho	d			Sequence report: ro
ΪΞ		Reps	Sample ID	Method	Actions	
N	1	2	60	Program 1	🖂 🖌 🗶 🕴	
	2	1	-	Program 2	🖂 🖌 🗶 🕇	
I						
I						
¢						
					b	

- Fig. 6-59 Overview of sequence
- **25.** Select <Save>. You will be directed to the homescreen of menu the METHODS & SEQUENCES.

6.14 Variables

Method variations can be easily performed with the help of method variables. Variables can be defined for method parameters like time of a command, flow rate of a pump. Before starting the method, the numerical values for the defined variables are entered.

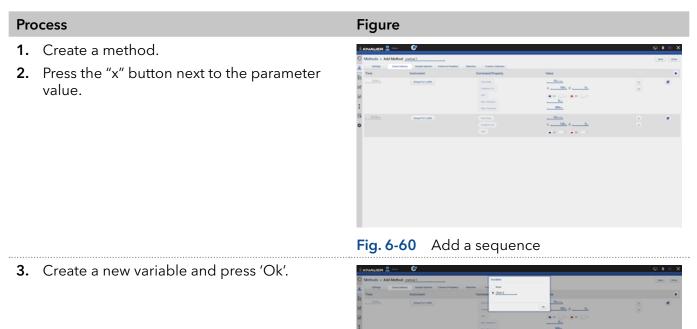
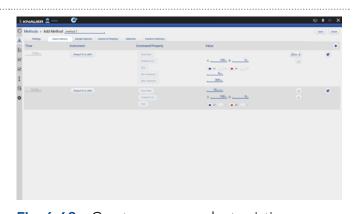


Fig. 6-61

Creating a new variable

- **4.** In the next method line, the existing variable can be selected or a new variable can be created.
- **5.** Save the method and press 'Load'. Before starting the method, the variable value must be entered.



- Fig. 6-62 Create more or select existing varaiables and save the method
- **6.** The method is started with the entered values for the variables.

i

KNAUER 🚨 🚥 🛛 💞					🖓 🛚 🖓
Methods & Sequences					(bat) (bas
· •	Det A				
serves learnes		Column.	Netsteen	Variables	
emethod 1 Comethod 2 Comethod 3	,	Start Options		from A.	Here,
Comethod 2		10-0-1			
©method 3		The Name			
		Tablana:			
		(mercent)	. Select		

Fig. 6-63 Select a column

Note: For sequences the value of the variable is entered for each sequence line during editing of the sequence.

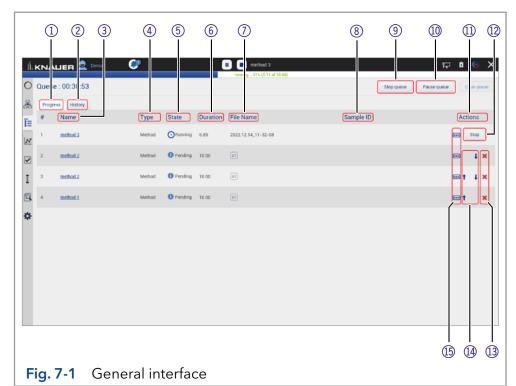
8

7. Run Queue

The run queue is used to manage and schedule methods and sequenes. Once a sequence or method is initiated, it is entered into the run queue automatically.

7.1 General interface

To view the current run queue, select the <Run Queue> button. Each row in the run queue represents a method or sequence that is in process or waiting. From the run queue, you can view details about each run or sequence in the queue, including the following:



Legend

- ① Tab <Progress> shows the sequences that still have to be processed.
- ② Tab <History> shows the sequences that have already been processed.
- ③ Name of the method/sequence
- (4) Type of the method/sequence
- (5) State Pending, Running, Completed, Aborted
- 6 Duration of the method/sequence
- (7) File name of method/sequence (refer to chapter 6.11)
- (8) Sample ID (refer to chapter 6.11)
- (9) <Stop Queue> aborts the actual method/sequence
- (1) <Pause Queue> immediately pauses the run. You can decide wether the flow is off or kept on.
- (1) Actions you can stop methods/sequences.
- Stop> will immediately terminate the item currently running in thequeue and pause the sequence.
- ① Delete method/sequence from run queue
- (A) Rearrange order of methods/sequences
- (15) Show comments

7.2 Show progress and history

Process

Tab <Progress>

1. You can view all queued methods/sequences.

Fi	g	u	re	е
	-			

		UER 👤 🚥	<u>;</u>			running 15 (0.12 of 10.00)		🖓 🖣 🤤 🕻
C	Queue	: 00:21:52					Stop queue	Passe quese Orar quese
8	Prope	History						
s.	•	Name	Type	State	Duration	File Name	Sample ID	Actions
N	1	Program.2	Molecel	Ofurning	9.88	2,2022.10.11,12-33-05	2,2922.10.11,12-33-05	E (900)
2	2.3	sequence.1	Separate	O Pending	12.00			×
I								
3								
₽								

Fig. 7-2 Show progress

- 2. Select <Pause Queue> to hold the flow with the following options:
 - Hold
 - Hold with flow off

		UER 👤 🚥	67		🔳 🔳 Program 2		🗆 🛱 🖨 🖓 🗙
_		: 00:21:08			serving _ 4% (3.84 of 14.00) Stop Flow		
1	Queue	1:00:21:08				Stop queue	Passe queue
5		ss History			Hold Hold with flow off		
		Name	Type	State		Sample ID	Actions
1	1	Program.2	Method	Offering	canot (A	2,2922.10.11,12-33-05	Stop
	2.3	sequence.1	Sequence	O Pending			×

Fig. 7-3 Pause Queue

Figure

Process

Tab <History>

1. You can view all previous performed methods/sequences.

0	Queue	: 00:12:00					Start queue Passe queue	Clear queue
8	Progres	8 Hotory						
n.	•	Name	Туре	State	Duration	File Name	Sample ID	
N.	1	Program.2	Method	O Aborted	10.00	2,2022.10.11,12-33-05	2,2022.10.11,12-33-05	
2	2	Program.1	Method	O Finished	1.00	1_2022.10.11_12-31-52	1,2022.10.11,12-01-52	8
I	3	Enguan.1	Method	O Aborted	1.00	Proyram 1, 2022, 10 11, 11, 19-28	Program 1.2022 10.11.11-19-24	8
9	4	Proyram.1	Method	O Finished	1.00	Program 1.2022.10.11.10-42-12	Program 1.,2022.10.11,10-42-12	
¢	5	Program.1	Method	O Finished	1.00	Program 1.2022.10.11.10.20.51	Program 1.2022.10.11.10-39-51	-
	6	Program.1	Method	O Finished	1.00	Program.1.,2022.10.11,10-30-43	Program 1,2022.30.11,10-38-43	
	r	Program.1	Method	O Canceled	10.00	Proyram 1, 2022, 10,11, 10, 38-03	Program 1_2022.10.11_10-38-03	
		Proprint.1	Method	O Aborted	10.00	Program 1.2022.10.11.10.37.30	Program 1_2022 10.11, 10-37-38	
	,	Provini 1	Method	O Aborted	10.00	Program 1, 2022 10 11, 10-26-52	Program 1.2022 10.11,10-36-52	

- 2. You see a list with important data of the method/sequence.
 - Name of method/sequence which is linked to the corresponding entry in Methods & Sequences
 - Type (method/sequence)
 - State
 - Duration
 - Filename which is linked to the folder which holds the result file, reports and exports
 - Sample ID
 - Comments
- 3. To return, select < Progress>.

	CP Program 1 rending 10% (0.17 of 1.00)	무 🕯 😡
O Queue : 00:11:49		Stop queue Passe queue Ocer q
& Propess Hotory		
F Name	Type State Duration File Name	Sample ID Actions
1 > ampamor.).	Sequence 🕢 Running 12:00	Shop
2		
I		
G.	b.	
¢		

Fig. 7-5 History list

Fig. 7-4 Show history



8. Chromatogram view

With the start of data acquisition at the beginning of a method or sequence, a new icon appears on the left side of the screen. The chromatogram view opens automatically after method start and which shows the detector signal, auxiliary and method traces.

8.1 Live traces

Data acquisition can be started independent from the start of a method. Click the "start live" button in the Chromatogram View. Adjust the duration of the displayed live trace in Settings/Preferences - 1, 5, 15, 30, 45, 60 min. A result file cannot be saved from the acquired live trace data.

			🖓 🖣 🖓
Settings	Preferences		Apply Carr
General	Pressure Units Used for all applicable instruments	• bar MPa psi	
Configuration Management	System Detector Units	AU • mAU µAU	
Network Settings	Used for all applicable instruments	mRIU • µRIU nRIU	
Preferences	Temperature Units Used for all applicable instruments	Celsius *C Fahrenheit *F	
About	System Log Select items which should be logged	System	
Pump P 6.1L HPG	Log Lifetime	1 week	
Valve 6Port 2Pos	Audit Trail Audit all method changes		
Valve 8Port 4Pos	Duplicate Input Show additional input		
Valve 6Port 6Pos	Do not stop pumps In case of disconnection		
O Column Sel. Valve	Do not abort method Development state - no claim to function		
Valve 16Port 16Pos	System Pressure Max. Pressure for whole system	0.0,	
P Detector UVD 2.1L	Live Trace Duration	30 min	
Assistant ASM 2.2L	Displayed segment when Live Trace started		
Assistant ASM 2.2L			
User Management			
Demo			
Advanced Settings			
Energy Options			



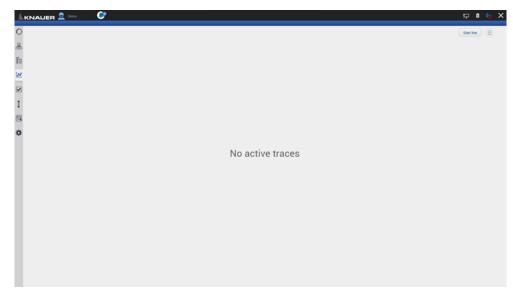


Fig. 8-2 Chromatogram View with Start live button





Showing/hiding traces, defining left y-axis 8.1

In the list of traces all available data traces, auxiliary traces and method parameters are shown. Switch buttons to <ON> to display the traces in the chromatogram.

Process	Figure
 You can activate the traces during or after a measurement. 	KNAUER 2 tom Program 5 1,2022 10 11,12-43-51 metric () () () () () () () () () () () () ()
 To show or hide the traces, select <traces> which is part of the multi function button. A new window is opened.</traces> 	

3. Activate the boxes to display the traces.

4. Confirm with <OK>.

Note: The selection of traces displayed in the chromatogram is saved. The next time the method is started, the chromatogram is displayed in the same view.

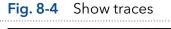
The selection of traces is saved in the result file. The Data Viewer shows the chromatogram in the same view as it was recorded in Mobile Control.

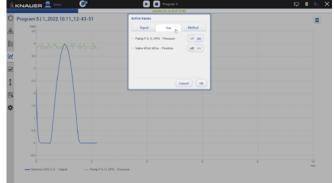


i

Process

Note: Activate the method trace "gradient" to display the composition of the gradient in the chromatogram.







5. Define left y-axis.

The scale and unit of the left y-axis can be assigned to different traces. Touch the trace name of interest and the y-axis will adapt to the trace. The selected trace name is highlighted in bold font.

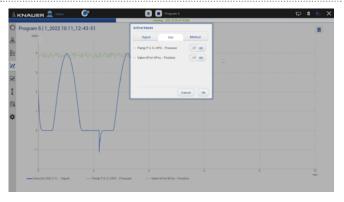
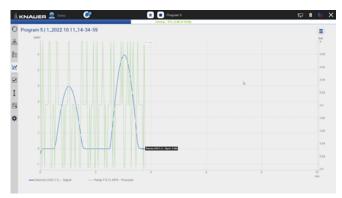
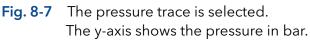


Fig. 8-6 The UV trace is selected. The y-axis shows the absorbance in AU.





8.2 Normalize traces

Process

Figure

 Traces can be normalized to other traces. Traces which are too far apart to be displayed together can be shown in the chromatogram window.

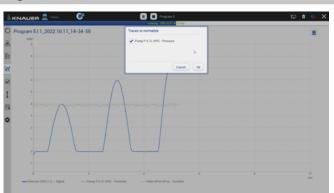


Fig. 8-8 Select the trace to normalize.



Fig. 8-9 Normalized traces shown in the chromatogram.

8.3 Add Second y-axis

Process

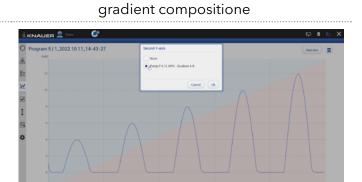
Figure

Fig. 8-10

511 2022 10 11 14-43-2

- For one of the active traces a 2nd y-axis can be added. The 2nd y-axis on the right shows the unit and the scale for the selected trace. The trace is automatically normalized.
- **1.** Chromatogram shows two traces, the UV signal and gradient composition.

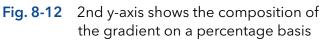
2. For one of the active traces a 2nd y-axis can be added. Select the gradient/ desired trace after pushing <Second y-axis>.



Chromatogram shows UV signal and

Fig. 8-11 Select second y-axis for pump gradient





3. The 2nd y-axis on the right shows the unit and the scale for the selected trace (gradient composition of pump). The trace is normalized automatically.

8.4 Zoom into the screen

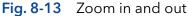
8.4.1 Via hand

To move the data trace, touch the surface with one finger and move the finger in the required direction (refer to Fig. 8-12).

- 1. To zoom in, touch the screen with two fingers and slide them apart.
- **2.** To zoom out, touch the screen with two fingers and slide them together.
- **3.** Double click on the screen with finger to scale the data trace to original size

Note: Zoom along the y-axis of the program trace gradient composition is not supported.





8.4.2 Via mouse

The data trace can be moved by moving the mouse with pressed left mouse button.

- 1. Scroll wheel up/down + ALT: Zoom in/out y-axis.
- 2. Scroll wheel up/down + CTRL: Zoom in/out x-axis.

By left double click the data trace will be fully unzoomed.



i

Note: After zooming, the view section can be moved down, up, left and right.



9. Checks & Tests

9.1 GLP

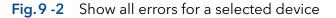
In menu GLP, you find a list of all devices for which GLP data can be displayed. Choose the respective device to view GLP data. By pressing the button "Show all errors" the device errors of each device are displayed.

IALIER 👤 admin 🚱 ecks & Tests				FP 🕻 🕞 🗙 Version 5.8.110
P Pump P 6.1L LPG Valve 6Port 2Pos	Detector RID 2.1L Secial number Plan number Plan number Demains secial contains secial contain	FRB200400004 EDD31 01.24 6698.2 h 22.01.2020 22.01.2020 1 22.01.2020 1 5946.0 h 22.01.2020 1 20.04.2020 QC.100264.001	Leak Sensor Senal number Fitmaate verston Log Entries Show all instrument enters	Verson 8.8.110 4279383126 00.04 Show all errors

Fig. 9 -1 Checks & Tests - Overview

By pressing the button "Show all errors" the device errors of each device are displayed.

Checks & Tests	Detector RID 2.1L Errors		Version 5.8
GLP	17.03.2020, 00:00:00 14:49 Zero glass malfunction. Position overrun.	20002 sor	4279383
Pump P 6.1L LPG	16.03.2021, 00.00.00 18.09 Zero glass malfunction. Position overrun.	20002	00
Valve 6Port 2Pos	17.03.2021, 00:00:00 18:09 Zero glass malfunction. Position overrun.	20002 ement errors	Show all error
Detector RID 2.1L	25.03.2021, 00:00 00 11:49 Zero glass malfunction. Position overrun.	20002	
Checks	25.03.2021, 00:00:00 15:19 Leak detected.	416	
System Check	25.03.2021, 00:00.00 15:20 Leak detected.	416	
	26.03.2021, 00.00.00.11.52 Zero glass malfunction. Position overrun.	20002	
	31.03.2021, 00:00 00 17:30 Low light intensity. Minimum exceeded.	20015	
	31.03.2021, 00:00.00 17:30 Low light Intensity, Minimum exceeded.	20015	
	31.03.2021, 00:00:00 17:30 Low light intensity, Minimum exceeded.	20015	
	31.03.2021, 00:00.00 17:30 Low light intensity. Minimum exceeded.	20015	
	31.03.2021, 00:00 00 17:30 Low light intensity. Minimum exceeded.	20015	
	31.03.2021, 00.00.00 17:30	20015	
		OK	



AZURA® Autosampler AS 6.1L
Serial number
Firmware version
Injector valve cycles
Syringe valve cycles
Syringe cycles

AZURA® Column Thermostat CT 2.1

Serial number

Firmware version

Operating time

Installation date

Last service date

AZURA[®] Assistant ASM 2.1L

The view of the assistant depends on the installed devices.

Serial number

Firmware version

Operating time

Installation date

Last service date

	Left, Middle, Right device
	Serial number
	Pump
	Firmware version
	Operation time
	Head type
	Valves
	Configuration
	Switching cycles
	Detector
	Firmware version
	Operation time
	Starts
	Leak sensor
	Serial number
	Firmware version
•••••••••••••••••••••••••••••••••••••••	

AZURA[®] Assistant ASM 2.2L

The view of the assistant depends on the installed devices.

Serial number

Firmware version

Operating time

Installation date

Last service date

pends on the installed
pends on the installed
tant modules resemble the
es
th (FWHM) [nm]
nit
mit
er switches
uracy
m
ım
ine 486.0 nm
line 656.6 nm
ply
l
)

Serial number

Firmware version

Serial number	
Firmware version	
Operating time	
Instrument's power	cycles
Installation date	
Last service date	
	Optical Properties
	Optical bandwidth at 656 nm (FWHM)
	Light intensity I-Sig at UV-maximum
	Light intensity I-Ref at UV-maximum
	Number of filter wheel switches (only UVD 2.1L
	Integration time
	Lamp Power Supply
	Serial number
	Operating time
	Firmware version
	Supply number
	Deuterium Lamp
	Serial number
	Operating time
	Starts
	Lamp number

Detector AZURA® DA	AD 2.1L/DAD 6.1L
Serial number	
Firmware version	
Operating time	
Installation date	
Last service date	
	Optical Properties
	Optical bandwidth at 656 nm (FWHM)
	Optical bandwidth at 253 nm (FWHM)
	Stray light (AU)
	Lower spectral limit [nm]

	Upper spectral limit [nm]
	Number of shutter switches
	Integration time
	Wavelength Accuracy
	Holmium 360.9 nm
	Holmium 446.2 nm
	Deuterium beta line 486.0 nm
	Deuterium alpha line 656.6 nm
	Lamp Power Supply
	Serial number
	Operating time
	Firmware version
	Supply number
	Deuterium Lamp
	Serial number
	Operating time
	Starts
	Lamp number
	Leak Sensor
	Serial number
	Firmware version

Detector AZURA® RID 2.1L

Serial number	
Firmware version	
Operating time	
Installation date	
Last service date	
	Light Source
	Operating time
	Installation date
	Light source number
	Validation Data
	Last measured span
	Last measured span date
	Cell batch number
	Deuterium alpha line 656.6 nm

	Leak Sensor
	Serial number
	Firmware version
AZURA [®] Pump P 6.1L	
Serial number	
Firmware version	
Operating time	
Installation date	
Last service date	
Motor operating time	
	Leak Sensor
	Serial number
	Firmware version
	Head left/right
	Serial number
	Operation time
	Cycles
	Volume
	P-index
	Head type
	Leak Sensor
	Serial number
	Firmware version
• • • • • • • • • • • • • • • • • • • •	

AZURA® Pump P 8.1L	
Serial number	
Firmware version	
Installation date	
Last service date	
Operating time	
Flow delivery time	
Total volume	
Number of SSV	
Degasser present	
Manual purge valve	
	Pressure sensor
	Туре

Leak Sensor
Serial number
Firmware version
Head A/B
Serial number
Last service date
Operation time
Current operation time
Cycles
Current cycles
Seal number
Volume
Head type
Maximum pressure
 •

AZURA® Pump P 4.1S, P 2.1S

Serial number

Firmware version

Operating time

Installation date

Last service date

Motor operating time

AZURA® Pump P 2.1L

Serial number

Firmware version

Operating time

Installation date

Last service date

Leak Sensor Serial number

Firmware version

Motor

Operation time

81

BlueShadow 50D	
Serial number	
Firmware version	
Operating time	
Installation date	
Last service date	
	Optical Properties
	Optical bandwidth at 656 nm (FWHM)
	Stray light (AU)
	Lower spectral limit [nm]
	Upper spectral limit [nm]
	Number of shutter switches
	Integration time
	Wavelength Accuracy
	Holmium 360.9 nm
	Holmium 446.2 nm
	Deuterium beta line 486.0 nm
	Lamp Power Supply
	Serial number
	Operating time
	Firmware version
	Supply number
	Deuterium Lamp
	Serial number
	Operating time
	Starts
	Lamp number
	Installation date
	Halogen Lamp
	Serial number
	Operating time
	Lamp number
	Installation date

BlueShadow 40D	
Serial number	
Firmware version	
Operating time	
Installation date	
_ast service date	
	Optical Properties
	Optical bandwidth at 656 nm (FWHM)
	Light intensity I-Sig at UV-maximum
	Light intensity I-Ref at UV-maximum
	Number of filter wheel switches
	Integration time
	Lamp Power Supply
	Serial number
	Operating time
	Firmware version
	Supply number
	Deuterium Lamp
	Serial number
	Operating time
	Starts
	Lamp number

BlueShadow 40P and 80P

Serial number	
Firmware version	
Operating time	
Installation date	
Last service date	
Motor operating time	
	Head
	Serial number
	Operating time
	Cycles
	Volume
	P-index
	Head type
	Maximum pressure

Interface Box IFU 2.1	1 LAN
Serial number	
Firmware version	
Valve V2.1S	
Firmware version	
Switching cycles	
Serial number	
Valve Drive VU 4.1	
Serial number	
Part number	
Operating times	
Power cycles	
Drive revolutions	
Firmware version	
Installation date	
Last service date	
Valve V 4.1	
Serial number	
Part number	
Position	
Ports	
Maximum pressure (k	bar)
Seals number	
Installation date	
Last service date	
Foxy & Vario-4000	
IP port	
IP address	
Serial number	
Firmware version	
Rack type	
Vial cout	

9.2 System Check

\frown	
1	
\checkmark	

Note: The system check is based on reviewing the GLP data. The GLP check list in the following chapter summarizes the thresholds for passing the system check. Action resulting form the check are recommendations. Please consider the true state of your device before realizing.

Process

1. Go to Checks & Tests and select System Check.

i

- 2. Activate the checkboxes to perform a system check. If you want only one device to be checked, activate the respective checkbox.
- 3. Press <Start>.

Pump P 6.1LLPG Pump P 2.1LLPG Ternary C Aussampler A5 6 1L	System Check Pump P 6.1L LPG Pump P 6.1L LPG Pump P 2.1L LPG Ternary Autosampler AS 6.1L	F8E133700001 FAD132100001
Pump P 2.1L LPG Ternary	Pump P 2.1L LPG Ternary	
	<u> </u>	FAD132186801
	 Autosampler AS 6.1L 	
Autosampler AS 6.1L		F28221900004
	 Valve 6Port 2Pos 	FVH134700005
Thermostat CT 2.1	Thermostat CT 2.1	FCC211818877
	 Detector DAD 6.1L 	F03132000001
Valve 6Port 2Pos	Stat	Gour. System Check Folder
Detector DAD 6.1L		
Checks		
System Check &		
System Check &		



Note: When the system check is finished a summary of the test is shown (pdf file shown below). A system check cannot be performed for devices which are embedded in programs.

9.2.1 GLP check list

ASM 2.1L	UVD 2.1S: After 2000 hours lamp operating time, the deuterium lamp should be replaced. P 4.1S: After 1000 hours, the pump heads should be maintained. V 4.1S/VICI: After 50000 switching cycles, the rotor seal should be replaced.
AS 3950/AS 6.1L	After 12500 injector valve cycles, a preven- tative maintenance procedure should be carried out.
DAD 6.1L	After 2000 hours deuterium lamp operating time, the deuterium lamp should be replaced. After 1000 hours halogen lamp operating time, the halogen lamp should be replaced.
RID 2.1L	After 20000 hours lamp operating time, the LED lamp should be replaced. After 1 year, the span should be checked.
UVD 2.1S & L MWD 2.1L/DAD 2.1L	After 2000 hours lamp operating time, the deuterium lamp should be replaced.
P 4.1S	After 1000 hours, the pump heads should be maintained (saved only in data base, this means only valid for one tablet; no check is carried out if the pump head has been changed or maintained).

P 6.1L/ P 2.1L	After 7000000 cycles, the pump heads should be maintained.
V 2.1S, VICI or V 4.1	After 50000 switching cycles, the rotor seal should be replaced.
Fraction collector Foxy/Vario-4000	No tests defined.

10. Column Management and System Pressure

The column library can be used to manage columns by serial numbers, determine the number of injections for the individual column, and automatically reduce the system pressure to the maximum pressure of the column.

In the column template, the general parameters of the column, such as column type, particle size, length, internal diameter, maximum pressure are defined. With "Add column", a column type can be selected from the template list and created as a unique column by entering the serial number. Once a unique column is activated the maximum pressure entered for the column is set as system pressure. This limit applies as maximum pressure to the entire system. The maximum pressure of all pumps is restricted to the system pressure both in the Detail View and during the method. As soon as the method is sent to the queue, maximum pressure values are adjusted. If the column management function is not used, the system pressure can be entered under Settings/Preferences/System pressure. The column entries can be exported to a csv file via "Export column".

Traces can be normalized to other traces. Traces which are too far apart to be displayed together can be shown in the chromatogram window.

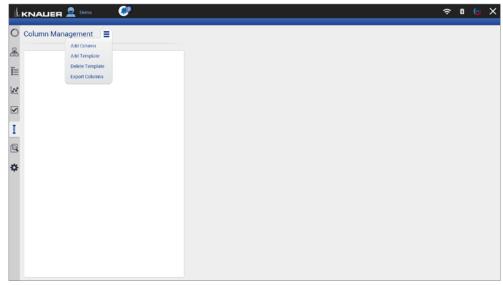
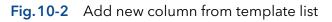
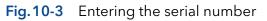


Fig. 10-1 Menu of the column management

1		(î:	۵	6	×
0	Select Column	_	_	_	1
윮	Filter				
I.	25/0126548				l
12	25VE218784				I
	2)00156183				l
					l
I	210016768				l
0					l
*	template				
	8 Rem(s) shown / 8 Rem(s) found / 8 Rems overall	Cance		Ok	

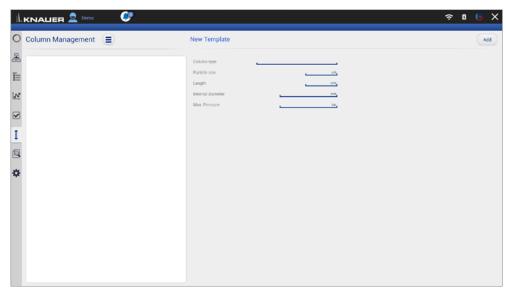


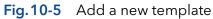
		≈ 0 © X
New Column		Add
Column type	2100146785	
Particle size	5 µm Serial number	
Length x ID Max. Pressure	150 mm x 5 mm Comment 500 bar	
	Column type Particle size Length x ID	Column type 2100146785 Particle size 5 µm Seikil number Length x ID 150 mm x 5 mm Comment



1					≈ 0 © X
0	Column Management 📃				Activate Delete
	2100146785 1267464553	Particle size Length x ID Max Pressure	150 mm x 5 mm	Setial number Comment Injections	1267464553 special 0
Q					
*					

Fig.10-4 Activate column





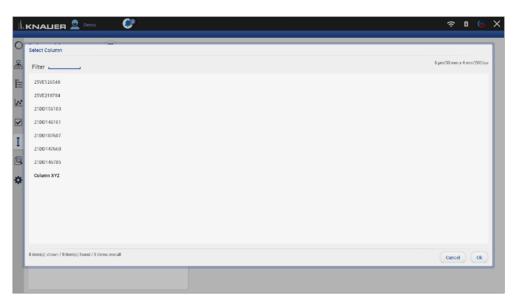


Fig. 10-6 New template

C	Settings	Preferences		Apply Cancel
2	Preterences >	Pressure Units Used for all applicable instruments	• bar MPa psi	
	About	System Detector Units	AU • mAU μAU	
	Instruments	Used for all applicable instruments	mRIU • µRIU nRIU	
	Pump P 6.1L HPG		Celsius *C Fahrenheit *F	
1	Valve 6Port 2Pos	Temperature Units Used for all applicable instruments	• Celsius *C • O Panrenneit *P	
	Valve 8Port 4Pos	System Log Select items which should be logged	System	
1	O Valve 6Port 6Pos	Log Lifetime	I week	
ł.	Column Sel. Valve	Audit Trail Audit all method changes		
l	Valve 16Port 16Pos	Duplicate Input Show additional input		
	Detector UVD 2.1L	Do not stop pumps In case of disconnection		
	X Assistant ASM 2.2L	Do not abort method Development state - no claim to function		
	Assistant ASM 2.2L	System Pressure	✓200.0 isr,	
	User Management	Max. Pressure for whole system		
	Demo	Live Trace Duration Displayed segment when Live Trace started	30 min	
	Advanced Cetting			

Fig. 10-7 System pressure in Setting/Preferences

🔍 11. Logs & Errors

			_		
ılı.		👤 admin 🛛 🍳)		두 🏻 🗦
C	Logs & Error:	s			Show logs in folder Export to text Export to XM
5	Level 7	Date/Time 🛛	User 🛛	Source 7	Message
1	f) message	13.10.2022.09:46:13	admin	FCC211810077	Thermostat CT 2.1 Connection success 172.16.5.244:10001
	1 message	13.10.2022, 09:46:11	admin	FZB221900004	Autosampler AS 6.1L Connection success 172.16.5.242.2101
N.	1 message	13.10.2022, 09:18.57	admin	FVH194700005	Valve 6Port 2Pos Connection success 172.16.5.253.10001
	1 message	13.10.2022, 09.18.39	admin	FVH194700005	Valve 6Port 2Pos Disconnecting 172.16.5.253.10001
~	1 message	13.10.2022, 09:18:29	admin	FRB200400004	Disconnecting 172.16.5.243:10001
	message	13.10.2022, 09:18:12	admin	F0J132000001	Detector DAD 6.1L Connection success 172.16.5.241:10001
t	message	13 10 2022, 09 17 06	admin	FAD132100001	Pump P 2.1L LPG Ternary Parameters Gradient Type successfully applied.
	1 message	13.10.2022.09:16:45	admin	FAD132100001	Pump P 2.1L LPG Ternary Connection success 172.16.5.237:10001
	1 message	13.10.2022, 09:14:22	admin	F0J132000001	Detector DAD 6.1L Disconnecting 172.16.5.241:10001
	1 message	13.10.2022, 09.14.18	admin	FR8200400004	Connection success 172.16.5.243.10001
₽	1 message	13.10.2022, 09.13.42	admin	FZB221900004	Autosampler AS 6.1L Connection error Autosampler AS 6.1L: 172.16.5.242.2101, FZ8221900004
	1 message	13.10.2022, 09:13:37	admin	FVH194700005	Valve GPort 2Pos Connection success 172.16.5.253.10001
	message	13.10.2022, 09:13.37	admin	FBE133700001	Pump P 6.1L LPG Connection success 172.16.5.248:10001
	1 message	13.10.2022, 09.13.37	admin	F0J132000001	Detector DAD 6.1L Connection success 172.16.5.241:10001
	 message 	13.10.2022.09:13:37	admin	system	Login successful
	 message 	13.10.2022, 08:13:44	admin	system	Logout
	 message 	13.10.2022, 08.13.44	admin	F0J132000001	Detector DAD 6.1L Disconnecting 172.16.5.241:10001
	1 message	13.10.2022, 08:13:44	admin	FVH194700005	Valve 6Port 2Pos Disconnecting 172.16.5.253.10001
	 message 	13.10.2022, 08:13:44	admin	FZB221900004	Autosampler AS 6.1L Disconnecting 172.16.5.242:2101
	message	1310.2022, 0813.44	admin	FBE133700001	Pump P 6 1L LPG Disconnecting 172.16.5.248:10001
	message	13.10.2022, 08.10.01	admin	FZB221900004	Autosampler AS 6.1L Connection success 172.16.5.242.2101

Legend

(1) Show logs in folder:

Opens the folder C:\Mobile Control\Logs.

② Export to text:

Exports a textfile in the C:\Mobile Control\Logs.

③ Export to XML:

Exports a XML file in the C:\Mobile Control\Logs.

④ Period:

Define a time period showing the recorded logs and errors. Press the button and enter two dates which define the period.

5 Filter:

i

Filters the results dependent on the user and the device.

Note: System logs are activated by default and can be deselected in Settings > Preferences. Recording of communication logs is deactivated by default. Activation of communication logs is described in the following chapter 11.1.

Note: In case of any error caused by a device, the pump will be stopped and the column thermostat will be switched off. Only exception are stand alone compact pumps AZURA® P 4.1S/P 2.1S. This safety feature can be bypassed by enabling "Do not stop pumps" in Settings > Preferences.

11.1 Activation of communication log

Process

i

Figure

- Start the ConfigEditor.exe to set the communication logs. The separate tool is located in C:\Program Files (x86)\Mobile Control\ConfigEditor.exe.
- **2.** Select "Debug" and press apply. Activate Mobile Control before selecting the logs.

	Columns	
	Column.Database	C:\Mobile Control\ColumnParameters.x
	Column.Reports	KnauerA4
~	Developer	
	Dev.Demo.LNP	False
	Dev.Tabs.Memory	0
	Dev.Tools	False 🗸
/	Log	_
	Driver.FileLog	False
	Javascript.FileLog	False
~	LogLevels	
	Driver.AdapterService	False
	Driver.CommErrors	False
	Driver.ControlService	False
	Driver.Database	False
	Driver.FractionCollection	True
	Driver.License	False
	Driver.Misc	False
	Driver.MonitorMode	False
	Driver.WatchDog	False
	Javascript.Communication	False
~	Settings	
	Date.Format	DD.MM.YYYY
	Display.Dim	30

Note: Log files are saved in C:\Mobile Control\Logs. Mind the hard disk space if logs are activated.



12. Settings

12.1 General

12.1.1 Configuration managment

Create new or edit existing configurations and define the system configuration.

12.1.2 Network settings

4				F 🛚 🕞 🗙
0	Settings		Network Settings	Apply Cancel
	Configuration Management Configuration Management Network Settings Preferences About Instruments Pump P 6.1L HPG Detector UVD 2.1L	>	Network Interface IP Port Addressing Scheme IP address Subnet mask Gateway LAN Settings	LAN: Pealtek PCie 000 Family Controller 10001 DHCP 172,16,5,203 255,255,255,00 172,16,5,1 Reset
	Assistant ASM 2.2L User Management Demo Advanced Settings Energy Options		Þ	

Fig. 12-1 Networks settings

Network Interface	List of the network adapter.
Port	Port = 10001 (factory default) For stable connection use identical port numbers in the device configuration of the chromatography software or Mobile Control and in the device.
Addressing Scheme	Shows the LAN settings of the tablet, laptop or desktop PC. DHCP: automatically setting of IP address STATIC: manual entry of IP address
IP Address	Displays the IP address.
Subnet Mask	Displays the subnet mask.
Gateway	Displays the gateway.
LAN Settings	Reset communication settings of KNAUER devices to DHCP.
	A device you want to reset should be switched on and connected to the same router. Enter the serial number of the device and click the <reset> button. Restart the device. The device is now set to DHCP. You can also set LAN settings of the device with Firmware Wizard (refer to chapter 15.1).</reset>

Note: Communication in LAN is realized via ports. If more than one HPLC system is connected to the same LAN and you plan on controlling them separately, you can use different ports to avoid interference. To do so, the port number of every device has to be changed to the same port number in the device configuration of the chromatography software or Mobile Control.

We recommend to use the same port number for all devices in the same system.

12.1.3 Reset of LAN settings to DHCP

In Mobile Control you can set the device on DHCP.

If you can not find the device on the network because you do not know the static IP address, change the network setting to DHCP.

This function can be carried out by:

- 1. Mobile Control
- 2. Firmware Wizard

In the following, the first approach is explained. For the using the Firmware Wizard, refer to chapter 15.1.

A static IP address can be set in the setting section of each interface (refer to chapter 12.2.1) or by the Firmware Wizard (refer to chapter 15.1).

Process	Figure
 Go to Settings > Network Settings. 	
	Fig.12-2 Open Network Settings

2. Press <Reset>. A window is opened.

 Image: Contract of the state of t

- 3. Enter the serial number of the device.
- **4.** Confirm with <OK>. The device is now set to DHCP.

Here, you can only change the LAN settings to DHCP. With the Firmware Wizard you can change from Static (fixed IP address) to DHCP and vice versa (refer to chapter 12.1.2).

5. We recommend a restart of the devices, to accept the new LAN settings.

Settings	N Reset communication settings	Apply Cance
General Configuration Management	Ne Enter Serial Number of the instrument to set communication settings to defaults.	LAN. Realisk PCIe GBE Family Controlle
Network Settings	> A: 5/NF00141210012,	DH
Preferences	a a a	172.16.5.2
About	S. Cateway	255.255.255
Instruments	LAN Settings	
Pump P 6.1L HPG		Nese
Detector UVD 2.1L		
Assistant ASM 2.2L		
User Management		
Demo		
Advanced Settings		
Energy Options		

Fig.12-4 Reset LAN Settings

Note: For AZURA P 2.1S/P 4.1S devices, resetting the network settings to DHCP can only be performed with the Firmware wizard.

12.1.4 Preferences

Note: Always confirm your selection with <Apply>.

) :	Settings	Preferences		Apply Cance
3	General	Pressure Units Used for all applicable instruments	• bar 🖉 MPa 🔵 psi	
	Configuration Management	System Detector Units	_ AU ● mAU _ μAU	
2	Network Settings	Used for all applicable instruments	mRIU 💿 µRIU 📄 nRIU	
3	Preferences	Temperature Units Used for all applicable instruments	Celsius *C Fahrenheit *F	
	About	System Log	 System 	
	Instruments	Select items which should be logged		
1	Pump P 6.1L HPG	Log Lifetime	1 week	
	Detector UVD 2.1L	Audit Trail Audit all method changes		
1	X Assistant ASM 2.2L	Duplicate Input Show additional input		
	User Management	Do not stop pumps		
	Demo	In case of disadnection		
	Advanced Settings	Do not abort method In case of instrument error		
	Energy Options	System Pressure Max. Pressure for whole system	0.0 ₁₀₇	
		Live Trace Duration Displayed segment when Live Trace started	30 min	

Fig.12-5 Preferences overview

Pressure Units	Selection between bar, MPa and psi.
System Detector Units	Selection between AU, mAU, μAU (UV detectors), mRIU, μRIU, nRIU (RI detectors).
Temperature Units	Selection between degrees Celsius °C and degrees Fahrenheit °F.
System Log	Mobile Control records the system proto- col/system logs The entries are listed under Logs & Errors. Activation of communication logs are explained in chapter 11.1.
Log Lifetime	Log lifetime: duration the log data are stored
	Choose between 1 week, 2 weeks, and 1 month.

i

Audit Trial	Records all program changes. You can view the protocol under Methods & Sequences (refer to chapter 6.12).
Duplicate input	Duplicate input facilitates filling entry fields with the virtual keyboard. Since the virtual keyboard covers a large part of the screen, a popup window appears in the upper section repeating the input request.
Do not stop pumps	In case of disconnection the pump continues to convey with the last parameters.
	This function does not apply to pumps in the Assistant ASM 2.2L which always stop after disconnection.
Do not abort method	Normally a method is aborted when a device error occurs.
	With this function activated the method is continued despite device error. A following method is not started. Due to its develop- ment state, the customer should test this function in advance. There is no claim to function.
System pressure	The entered system pressure is applied as maximum pressure to all pumps present in the system configuration .
Live Trace Duration	The duration can be set here.

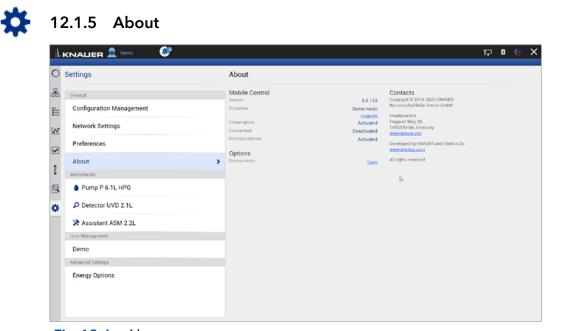


Fig.12-6 About

This chapter provides information about the version of Mobile Control and which operating mode/license is enabled.

If you are in Trial Period or in Demo Mode you will find a link to activate Mobile Control. Open the Upgrade link which opens the activation page. Enter the new activation code that will unlock the new functionality. For an activated license the activation code is displayed.

Open the Installation information to learn more about:

- Installation
- Upgrade
- Troubleshooting
- Windows settings for Mobile Control
- Supported instruments
- Computer requirements
- Operating the Mobile Control
- Notes on the use of Mobile Control

Also consider the known issues on Mobile Control in this document.

12.2 Instruments

All devices configured in the system are listed. The right part shows the device settings. Here, device specific parameters can be changed.

12.2.1 General interface

Settings	Pump P 6.1L LPG			Apply C
General	Name	Pump P 6.1L LPG	Connectors	
Configuration Management	Serial number	FBE133700001	Start input	Er
Network Settings	Network Settings		Analog Output	
Network Settings	IP Port	10001_	Offset	
Preferences	DHCP Static		Full scale	
About	IP address	172.16.5.248	Signal source	Dir
Instruments	Subnet mask	255.255.255.0	Time constant	
Pump P 6.1L LBG	Gateway	172.16.5.1	Pressure Offset	
User Management	Leak Sensor			
★ admin	Sensitivity	Low	Actual interpreted pressure	
Demo	Pump Head Settings			Set to Zero
Advanced Settings	Pump head	auto detect	Factory Settings	
Energy Options	Mixing chamber		Restore defaults	
		100 µL.	Eluent control	0
	Pump Gradient Type		P Max	
	Gradient type	LPG		

Fig.12-7 Device Settings - general interface

Name	By default, the device designation is used as device name. Tap the name to change it. Change the name if more than one device of the same type is configured in the system.
Serial number S/N	The serial number of the device is read out automatically.
IP Port	Communication in LANs is realized via ports which are part of the network address. If more than one HPLC system is connected to the same LAN and you plan on controlling them separately, you can use different ports to avoid interference.
	To do so, the port number of every device has to be changed to the same port number in the device configuration of the chromatography software or Mobile Control. We recommend to use the same port number for all devices in the same system.
10001. Use iden the chromatogra	ry settings for the port of AZURA devices is tical port numbers in the device configuration of aphy software or Mobile Control and in the de- he connection cannot be established.
	some instruments that do not allow to change 5 6.1L, Foxy, IFU 2.1 LAN, CT 2.1).
DHCP/Static	In DHCP mode the router allocates IP address and Subnet mask automatically. Static enables you to enter IP address and Subnet mask manually. Activate checkbox "Static" and enter the re-

Settings		Detector DAD 6.1L			Apply Can
General		Name	Detector DAD 6.1L	Active channels	
Configuration Management		Serial number	F0J132000001	Cell type	Test o
Network Settings		Network Settings		Extended linear range	no
Preferences		DHCP Static		Autozero at wavelength change	no
About		IP address	172.16.5.227	Analog Output	
Instruments		Subnet mask	255.255.255.0	Offset 1	0.0
Pump P 6.1L LPG		Gateway	172.16.5.1	Scale 1	1.0 AU
Valve 6Port 2Pos		Leak Sensor		Offset 2	_0.0
Detector DAD 6.1L	>	Sensitivity	Low	Scale 2	1.0 AU
User Management		Integration Time		Offset 3	_0.0
🖈 admin		Maximum sampling rate	10	Scale 3	1.0 AU
Demo		Integration time Get optimal integration time	 Optimal	Offset 4	.0.
Advanced Settings		Get optimal integration time	Optimai	Scale 4	1.0 AU

Fig. 12-8 Static IP address

3	
IP addess	Displays the IP address of the device.
Subnet mask	An IP address consists of two parts. One part of the IP address designates the network address of the device. The other part designates the distinct address of an device inside of a network. The subnet mask defines which part of the IP address is the network address of an device. It determines which other devices the respective device can communicate with, namely all devices with the same network address.
	This network is called subnet. This means that all devices of a system and the computer have to operate in the same subnet, using the same network address. Devices in other networks can only be communicated with via a router.
Gateway	If communication has to be established with devices in other networks, a gateway is used. The gateway routes all network requests, which are not directed towards its own network (subnet) to another network (subnet). This task is usually performed by routers which communicate with subnets via IP protocols.
Leak Sensor	The leak sensor can be switched on and off. Three different settings are available, LOW (low sensitiv- ity), MEDIUM (medium sensitivity), and HIGH (high sensitivity). Press the button <on>, to activate the leak sensor.</on>
Sensitivity	Choose between Low, Medium, or High .
Restore Factory Settings	This function enables your to re-set the device to its default settings.

12.2.2 Assistant

Settings	Assistant ASM 2.2L			Apply Can
General	Name	Assistant ASM 2.2L	LEFT	Valve 0Port 0
Configuration Management	Serial number	FYC200400003	Configuration	
Network Settings	Network Settings	10001_	Position labels	Char
Preferences	DHCP Static		Replace seal	Repla
About	IP address	172.16.5.232	Rehome	Reho
Instruments	Subnet mask	255.255.255.0	MIDDLE	Pump P 4
🔀 Assistant ASM 2.2L	Gateway	172.16.5.1	Pump head	10
User Management	Leak Sensor		IMin sensitivity	
\star admin	Sensitivity	Low	IMax sensitivity	
Demo	Analog Settings		Eluent control	off
user1	Analog inputs	Settings	RIGHT	Detector UVD
Advanced Settings	Analog outputs	Settings	Calibration	Calibr
Energy Options				

Fig. 12-9 Device Settings - Assistant

Depending on the devices built in, the configuration is divided in LEFT, MIDDLE, and RIGHT. Devices are displayed according to device configuration.

Э
rrent m vhen Set- nitted
e re the
è
to
′V, J/V,
d and ng s d 10 s.

12.2.3 Autosampler

Settings	🂐 Autosampler AS 6.1L			Apply Ca
General	Name	Autosampler AS 6.1L	Volumes	
Configuration Management	Serial number	FZB221900004	Loop volume	
Network Settings	Network Settlings		Tubing volume	
	IP Port	2101	Syringe volume	25
Preferences	DHCP		Events	
About	IP address	172.16.5.202	Relay event	Aux
Instruments	Tray Configuration		Service	
Nutosampler AS 6.1L	> Tray configuration	108 Vials	Tray position	•
User Management	Options		Syringe position	Do not ch
\star admin	Prep. mode	off on	Needle exchange	
Demo	Thermostat	off on	Needle exchange	
Advanced Settings	Transport solvent scheme			
Energy Options	rransport solvent scheme	Wash bottle left		
			D:	

Fig. 12-10 Device Settings - Autosampler

Availability of options depends on the device type. Unavailable functionalities are grayed out.



Opens menu to select used autosampler tray configuration.

Choose according to your installed trays.

Settings	Tray	Apply Cance
General Configuration Ma	97 98 99 135 111 112 112 113 116 118 118 117 119 Plate Type:	. 10
Network Settings	12 Vials 18 m 17 m 19 m 11 m 19 m 19 m 19 m 19 m 19	
Preferences	77 78 79 79 79 79 79 79 79 79 79 79 79 79 79	250 µ
About	a a a a a c a c a a a a a a a a a a a a	Auxiliar
🎕 Autosampler A	- - - - - 30 Vials - - - - - - - 30 Vials	Hom
User Management		Do not chan
Demo	4	Sta
Advanced Settings		
chergy options		

Fig. 12-11 Tray configuration

Prep. Mode	Turn on, if autosampler uses Prep Mode
Thermostat	Turn on, if autosampler uses thermostat
Loop Volume	Enter volume of installed sample loop volume
Tubing Volume	Enter volume of installed tubing volume
Syringe Volume	Enter volume of installed syringe volume
Relay Event	Choose relay event if needed

Tray Position	Push the button to select position of the tray. A new window is opened (see fig. 9-12)		
	Select position of tray.		
	Home: backside of tray cabinet,		
	Front: frontside of tray cabinet to change vials		
	Set Tray Position		
	Home		
	Needle Exchange		
	Front		
	Do not change		
	Cancel Ok		
	Fig.12-12 Set Tray Position		
Syringe Position	Choose, if syringe needs to be changed.		
Needle Exchange	Press start to exchange sample needle.		

12.2.4	Column	Thermostat 2	2.1
--------	--------	--------------	-----

ıl.				₽ 0 ⊙ X
0	Settings	F Thermostat CT 2.1		Apply Cancel
*	General Configuration Management	Name Serial number	Thermostat CT 2.1	
	Network Settings	Network Settings	10001_	
	Preferences	DHCP Static		
I	About Instruments	IP address Subnet mask	172.16.5.204 255.255.255.0	
9	Thermostat CT 2.1 User Management	Gateway	172.16.5.1	
۵	* admin	Leak Sensor Sensitivity	Low	
	Demo			
	Advanced Settings			
	Energy Options			

Fig. 12-13 Device Settings - Column Thermostat

12.2.5 Detector

Åк					🖓 🕄 🖓
C s	Settings	P Detector UVD 2.1L			Apply Cancel
5	General	Name	Detector UVD 2.1L	Fraction Collection	
=	Configuration Management	Serial number	F0D141210026	Level	0.00004
	Network Settings	Network Settlings	10026	Delay Fraction event	0.0
•	Preferences	DHCP Static		Analog Output	
	About	IP address	172.16.5.203	Offset	0.0000-
	Instruments	Subnet mask	255.0.0.0	Scale	1 0 AU/V
1	Pump P 6.1L HPG	Gateway	172.16.5.203	Time constant	0.1 s
	Detector UVD 2.1L	Leak Sensor		Factory Settings	
ſ	X Assistant ASM 2.2L	Sensitivity	Medium	Calibration	Calibrate
	User Management	Autozero at wavelength change	off on	Restore defaults	Reset
	Demo			Virtual Signal File	
	Advanced Settings		Þ	No file selected.	Browse
	Energy Options				

Fig. 12-14 Device Settings - Detector

Level (only available in AZURA® UVD 2.1L)	Treshold which can be set. If this value is exceeded, an event starts.
Delay	Time delay between exceeding of the level treshold and event output.
Fraction event	Choose between inactive, Event 1 (relay con- tact) and Event 2 (TTL compatible output). (refer to the detector instructions).
Offset	Type in the correction offset which will be used for the signal recalculation.
Scale	Choose between 0 AU/V, 0.5 AU/V, 1 AU/V, 1.5 AU/V 2 AU/V, 2.5 AU/V, 3 AU/V, 3.5 AU/V, 4 AU/V, 4.5 AU/V and 5 V.
Time constant	Smoothes measuring values. Measuring points of a set time interval are combined and the mean value is displayed as a measuring point. A broader interval increases the smoothing proportionally. Choose between 0.00 s, 0.01 s, 0.02 s, 0.05 s (DAD), 0.1 s, 0.2 s, 0.5 s, 1.0 s, 2.0 s, 5.0 s, and 10 s.
Calibration	
Restore defaults	This function enables your to reset the device to its default settings.
No file selecteted	

Integration Time

(only available in AZURA® DAD 2.1L, DAD 6.1L and MWD 2.1L) Activate the button <optimal> and the optimal integration time will be calculated by the program. The maximum sampling rate for the integration time is also calculated and displayed.

Settings	Detector DAD 6.1L			Apply Canod
General	Name	Detector DAD 6.1L	Active channels	
Configuration Management	Serial number	F0.J132300001	Cell type	Test cell
Network Settings	Network Settings	10001_	Extended linear range	
Preferences	OHCP Static		Autozero at wavelength change	
About	IP address	172.16.5.227	Analog Output Officet 1	L 0.00-
Instruments	Subnet mask	255,255,255.0		
P Detector DAD 6.1L	Gateway	172.16.5.1	Scale 1	18 40/
User Management	Loak Server		Offset 2	0.00-
* admin	Sensitivity	Low	Scale 2	LEADY
Demo	Interpretion Time		Offset 3	0.00-
Advanced Settings	Maximum sampling rate	10	Scale 3	LEADY
Energy Options	Integration time		Officet 4	0.00-
	Get optimal integration time	Opteral	Scale 4	LEAUY
			Time constant	821
			Factory Settings	

Fig.12-15 Example for settings DAD 6.1L

A data rate of 20 Hz is only permitted when using one data channel. If several data channels of a detector are used, the data rate must be reduced to 10 Hz.

12.2.6 Interface Box IFU 2.1 LAN

ıl.	KNALIER 👤 admin 🔎				🗗 🛯 🕞 X
0	Settings	Interface IFU 2.1			Apply Cancel
	Settings Configuration Management Network Settings Preferences About Instruments P Interface IFU 2.1 ture Management * admin	Name Serial number Network Settings IP Port DHCP IP address	Interface IFU 2.1 IFU051101 10001 169.254.43.205	Analog Settings Active channels Configuration Channel 1 Range Trigger channel	Apply Cancel 1 Channel 1 4/-2.56 V orr
	Demo Advanced Settings Energy Options				

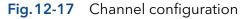
Fig. 12-16 Device Settings - Interface Box IFU 2.1 LAN

Note: The analog output of Interface Box IFU 2.1 LAN is not supported in version 5.0.0.

Active Channels	Choose the number of active channels (1-4).
Configuration Channel	Individual configuration of each channel. Select a channel and a new window is opened (see fig. 9-17).
	 1st line: Channel name. You can name the channel individually, e.g. with the name of the connected device.
	 2nd line: Displayed Unit of the recorded signal. Default setting is mV.

 3rd line: Y-Axis multiplier. Here you can change the conversion factor of the recorded voltage signal. The default value is 0.001 corresponding to mV-unit setting

ettings		Configuration of Channel 1	_		Apply Can
General	_	Ni Chan	nel 1 , erface IFU 2.1 ,	Analog Settings	
Configuration Management		St	mV, IFU051101	Active channels	
Network Settings		Ne (0.001 <u>1000</u> 1	Configuration Channel 1	Channe
Preferences		Cancel		Range	+/- 2.56
About		IP address	169.254.43.205	Trigger channel	C
Instruments					
P Interface IFU 2.1	>				
User Management					
★ admin					
Demo					
Advanced Settings					
Energy Options					

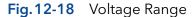


Range

The voltage range can be adjusted to the expected signal to get a higher resolution (see fig. 9-18).

One of the following ranges can be selected: ± 2.56 V, ± 1.28 V, ± 0.64 V, ± 0.32 V, and ± 0.16 V

Settings	🖍 Set Range			Apply Can
General	Ni • +/- 2.56 V	IFU 2.1	Analog Settings	
Configuration Management	St +/- 1.28 V +/- 0.64 V	351101	Active channels	
Network Settings	Ne +/- 0.32 V		Configuration Channel 1	Chann
Preferences	IP +/- 0,16 V	10001	Range	+/- 2.5
	°		Trigger channel	
About	IP	Cancel Ok 43.205		
Instruments				
Interface IFU 2.1	>			
User Management				
🖈 admin			5	
Demo				
Advanced Settings				
Energy Options				



Trigger Channel	If a method should be started via an external device, one of the four channels can be
	selected to receive the trigger signal. "Wait- ing for trigger" has to be activated for this function.

12.2.7 Pump

Settings	Pump P 6.1L LPG			Apply Ca
General	Name	Pump P 6.1L LPG	Connectors	
Configuration Management	Serial number	FBE133700001	Start input	Ena
Network Settings	Network Settings		Analog Output	
	IP Port	10001_	Offset	
Preferences	DHCP Static		Full scale	
About	IP address	172.16.5.248	Signal source	Disa
Instruments	Subnet mask	255.255.255.0	Time constant	
Pump P 6.1L LPG	Gateway	172.16.5.1	Pressure Offset	
Detector DAD 6.1L	Leak Sensor		Actual interpreted pressure	
User Management	Sensitivity	Low		Set to Zero
\star admin	Pump Head Settings		Factory Settings	Seriozeio
Demo	Pump head	auto detect	Restore defaults	R
Advanced Settings	Mixing chamber	100 µL.	Eluent control	of
Energy Options	Pump Gradient Type			ho
	Gradient type	LPG	P Max	

Fig.12-19 Device Settings - Example AZURA® Pump P 6.1L

Availability of options depends on the device type. Unavailable functionalities are grayed out.

•••••••••••••••••••••••••••••••••••••••	
Pump head	Displays the volume of the pump head.
Mixing Chamber	Choose between 50 µl, 100 µl, 200 µl, 250 µl or enter a value. Change only the volume if a different mixing chamber is installed.
Gradient Type	Some pumps are pre-configured as isocratic, HPG or LPG pump. In this case, the config- uration cannot be changed. For pumps that are not pre-configured, you can select (see below).
	For AZURA P 4.1S pumps, HPG mode is not supported.
Constant Pressure (only available for AZURA [®] P 6.1L)	Constant Pressure mode allows you to define a desired back pressure and a gradient com- position. The flow rate will be adapted until selected pressure is reached.
	Use 'Minimum' and 'Maximum Control Flow' in Detail Overview to set the minimum and maximum flow rates.
i Note: Refer to "APF configure pumps in	PENDIX A" for detailed instruction how to isobar or constant pressure mode.
Isobar mode (only available for AZURA® P 2.1L)	Isobar mode allows you to define a desired back pressure. The flow rate will adapted until selected pressure is reached.
	Use 'Minimum' and 'Maximum Control Flow' in Detail Overview to set the minimum and maximum flow rates.

Start Input	Choose Disabled, if you want to deactivate the analogue input. Choose between Start pump and Stop pump, if the pump should start or stop running upon receiving the trigger signal. Select Enabled, if the trigger signal shall be used to start a method.
	For more information about analog control, refer to the pump instructions.
Offset	Offsets the analog output signal in V.
Full Scale	Choose between 1V 2V and 5V to define the range of the analog output signal.
Signal Source	Choose between Pressure, HPG/LPG - A, HPG/LPG - B, Disabled, and Flow.
Time Constant	Smoothes measuring values. Choose between 0.1 s, 0.2 s, 0.5 s, 1.0 s, 2.0 s, 5.0 s, and 10 s.
Actual Interpreted Pressure	Manual autozero of the pump pressure.

12.2.8 Gradient Typ

Settings	Pump P 2.1L HPG A			Apply Can
General	Name	Pump P 2.1L HPG A	Pump Head Settings	
Configuration Management	Serial number	FAC122800001	Pump head	100
Network Settings	Network Settings		Pump Gradient Type	
	IP Port		Gradient type	HP
Preferences	DHCP Static		Connectors	
About	IP address	172.16.5.247	Start input	Disab
Instruments	Subnet mask	255.255.255.0	Analog Output	
Pump P 2.1L HPG A	Gateway	172.16.5.1	Offset	2
Pump P 2.1L HPG B	Leak Sensor		Full scale	
User Management	Sensitivity	Low	Signal source	Press
\star admin			Time constant	2
Demo			Eluent control	
Advanced Settings			Eldent control	110 4
Energy Options				

Fig.12-20 Device Settings - Synchronized Pumps

Gradient Type

Choose between

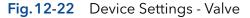
(only available for AZURA® P 2.1L)	Set Gradient Type
Equal pump heads are rec- ommended for HPG mode. When using different pump heads (e.g. 500 and 1000 ml), maximum pressure val- ues have to be considered. First, the pump with the lower maximum pressure must be selected, then the	 Isocratic LPG Binary LPG Ternary HPG A HPG B HPG C
second pump can be added to activate HPG mode.	Cancel Ok

	Fig.12-21 Set Gradient Type
Start Input	Choose Disabled, if you want to deactivate the analogue input. Choose between Start pump and Stop pump, if the pump should start or stop running upon receiving the trigger signal. Select Enabled, if the trigger signal shall be used to start a method for the analogue input of the pump.
Offset	Offsets the analog output signal in V.
Full Scale	Choose between 1 V, 2 V, and 5 V.
Signal Source	Choose between Pressure, HPG/LPG - A, HPG/LPG - B, Disabled, and Flow.
Time Constant	Smoothes measuring values. Choose between 0.1 s, 0.2 s, 0.5 s, 1.0 s, 2.0 s, 5.0 s, and 10 s.



12.2.9 Valve

Settings	Valve 6Port 2Pos			Apply Cance
General	Name	Valve 6Port 2Pos	Configuration	
Configuration Management	Serial number	FVH194700005	Configuration	
Network Settings	Network Settings	10001	Position labels	Chang
Preferences	DHCP Static		Replace seal	Replac
About	IP address	172.16.5.253	Rehome	Rehom
Instruments	Subnet mask	255.255.255.0		
Valve 6Port 2Pos	> Gateway	172.16.5.1		
User Management				
★ admin				
Demo				
Advanced Settings				
Energy Options				



Configuration	The RFID chip of the valve V 4.1 is read out and the valve type is automatically displayed.
Position labels	Each position of the valve can be given its own designation.
Replace seal	When replacing the rotor seal, the GLP spec- ification Seal swichting cycles is set to zero and the number of seals used is increased by one.
Rehome	Reset the position of the valve drive to Home position for dis-/mounting the valve onto the valve drive.

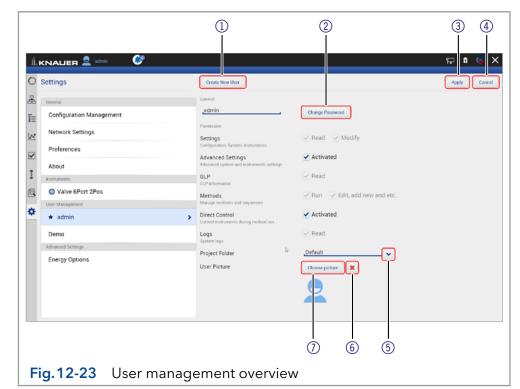
i

Note: On the valve drive VU 4.1, the event output can be switched to ON, OFF and Pulse independently of the valve switching events. Pulse is not supported.



12.3 User management

The user account of the user that is logged-in is displayed under USER MANAGEMENT. The administrator can create new user accounts or assign rights to any user by activating the check boxes.



Settings	Choose between "Read" and "Modify".
Advanced Settings	Check the box to authorize the user to make advanced system and instrument settings.
GLP	Check the box to authorize the user to read the GLP data.

Legend

- 1) Create New User account
- ② Change Password
- ③ **Apply** Confirm your entry
- ④ Cancel Cancel your entry
- (5) Choose a configuration.
- 6 Delete picture
- ⑦ Choose picture Upload a picture

Methods	Choose between Run Edit, add new and more
Direct Control	Check the box to authorize the user to control instruments during method run
Logs	Check the box to authorize the user to read the log files.
Project Folder	Name the folder. All user specific data are saved.
User Picture	Upload a picture of the user. A folder is opened.

Note: The user specific files will be saved in folder C:\Mobile Control\ Projects\Project folder*.

12.3.1 Create a new user

This option is only available for administrators.

Process	Figure	
 Go to Settings > User management. Select <create new="" user="">.</create> 	Image: Control of the second of the secon	

3. Activate the checkboxes depending on the authorization you want to give.

i

4. Always confirm your settings with <Apply>.

C	Settings	Create New User		Beats	Cancel
6	General	General			
=	Configuration Management	user1			
e	Network Settings				
3	Preferences	Permission			
I	About	Settings Configuration, System, Instruments	Read Modify		
	Instruments	Advanced Settings	Activated		
1	Valve 6Port 2Pos	Advanced system and instruments settings	Read		
	User Management	GLP GLP information	Head		
ł	* admin	Methods Manage methods and sequences	Run Edit, add new and etc.		
	Demo	Direct Control	Activated		
	Advanced Settings	Control instituments during method run			
	Energy Options	Logs System logs	✓ Read		
		Project Folder	_user1v		



5. After successful creation of the new user account a status message is displayed.

ettings	Create New User Delete User		Apply Ca
General	General		
Configuration Management	Admin .	Change Password	
Network Settings	Settings	🖌 Read 🕑 Modify	
Preferences	Configuration, System, Instruments Advanced Settings	✓ Activated	
About	Advanced system and instruments settings	✓ Read	
Valve 6Port 2Pos	GLP information		
User Management	Methods Manage methods and sequences	Run Edit, add new and etc.	
* admin	Direct Control Control instruments during method run	 Activated 	
Demo	Logs Dr.	Read	
Admin	Project Folder	test	
Advanced Settings	User Picture	Choose pacture	
Energy Options			

Fig.12-26 Settings - user account

6. On the left side, the menu with restricted authorization is shown. The menu bar on the left side is limited.

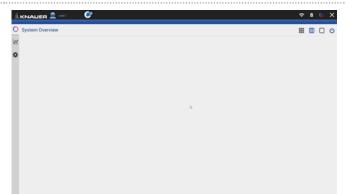


Fig.12-27 Restricted authorization

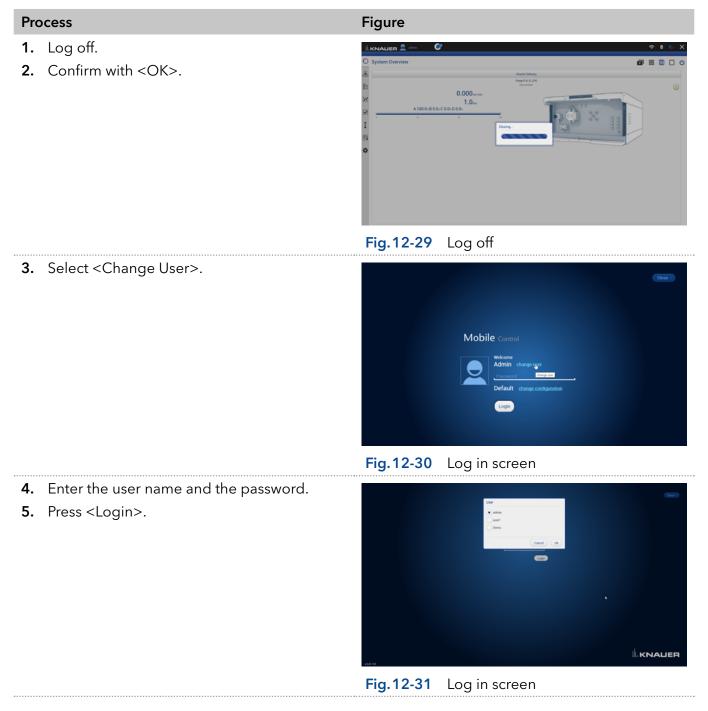
 Image: Control of Contro

Fig.12-28 Restricted authorization

7. Options which cannot be changed are displayed in grey out.

12.3.2 Change user account

The user must have the respective permissions to do so Settings > READ AND MODIFY).



12.3.3 Changing own password

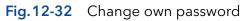
Each user can change their own password, if provided with the respective permissions. The administrator can change the password of every user, without knowing their current password.

Process

Figure

- 1. Log in with your user account.
- **2.** Go to Settings > User management.
- **3.** Select <Change password>. A new window is opened.

0	Settings	Create New User		Apply Cancel
&	General	General		
Ē	Configuration Management	<u>a 6</u>	Change Password	
w.	Network Settings	Permission Settings	✓ Read ✓ Modify	
	Preferences	Configuration, System, Instruments		
	About	Advanced Settings Advanced system and instruments setting	 Activated 	
I	Instruments	GLP GLP	I Read	
ß	Pump P 6.1L LPG	Methods	Run Edit, add new and etc.	
	User Manapement	Manage methods and sequences		
۰	★ admin	Direct Control Control instruments during method nun	 Activated 	
	Demo	Logs System logs	I Read	
	user1	Project Folder	_Default	
	Advanced Settings	User Picture	Choose picture 🗙	
	Energy Options			



- **4.** Enter the current password, and two times the new password.
- 5. Confirm with <OK> and <Apply>.

10	Settings	Change Password		Apply Caro
	General	current pas	sword,	
	Configuration Management	new pas	sword, Password	
	Network Settings	confirm new pas	sword Modify	
	Preferences	· · ·	Cancel Ok sated	
	About	Advanced system and instruments set	nogs	
	Instruments	GLP GLP	Read	
	Pump P 6.1L LPG	Methods	Run Edit, add new and etc.	
	User Management	Manage methods and sequences		
	★ admin	Direct Control Control instruments during method re	✓ Activated	
	Demo	Logs System logs	Read	
	user1	Project Folder	Default	
	Advanced Settings	User Picture	Choose picture	
	Energy Options			



Note: If you want to change the password of another user, you must log in as administrator and select the user (USER MANAGEMENT) to change the password.



12.4 Settings

12.4.1 Configuration management

The Configuration Management allows to control and manage different HPLC systems with one tablet. The systems are connected to different routers (networks). Each configuration is linked to the SSID (Service Set Identifier) of the router and contains information of the integrated AZURA devices in the system.

Network settings **and** system configuration are saved in each created configuration.

Legend

- Click on the button to create a new configuration.
- ② Shows the current configuration.
- ③ Apply
- (4) Lists the name of the configuration.
- (5) Lists the users which have access to this configuration.
- 6 Lists the name of the service set identifier (network).
- Possible edit actions: Click on the red cross symbol to delete a configuration. Click on the pen symbol to edit the settings.

		(1	2			3
ılı.	(NALIER 👤 admin 🛛 💞					귀	• • • ×
0	Settings	Create New	Configuration	System Configu	ration		Apply
æ	General		#	Name	Access	SSID	Actions
Ē≡	Configuration Management		1	Default	admin, user1		1
125	Network Settings		2	system 2	admin, user1		/ ×
 Image: A state Image: A state<th>Preferences</th><th></th><th>3</th><th>System 1</th><th>admin</th><th></th><th>/ ×</th>	Preferences		3	System 1	admin		/ ×
Ī	About	۲	4	System 3	admin, user1		1
	User Management						
6	🖈 admin						
\$	Demo				D		
	user1						
	Advanced Settings						
	Energy Options						
				4	(5)	6	7
Fi	g.12-34 Configuratio	n list					



Fig. 12-35 Connection of different systems to Mobile Control

There are 2 possibilities to create a configuration:

a) in menu configuration management (refer to chapter 12.4.1.1)

b) via Log in (refer to chapter 12.4.1.2)

Both ways are explained in the following chapters.

i

Note: Before adding a new configuration the required router must be connected to the PC/notebook/tablet.

12.4.1.1 Configuration via menu Settings

- 1. Open the info center in your tablet software.
- **2.** Select network.

	.							
Settings	Create New	Configu	ration Sys	tem Configu				
General			Name	Access				
Configuration Management	•	1	Default					
Network Settings	•	2	system3					
Preferences	0	з	system1			Å Pustion	ф Stronger- rindet	8 Bartuch
About	•	4	system2	a		G Rockern- spens	Bjil Mobiler Hotopot	¢ Firstonet- modus
User Management	1.1				d Ungebungs-	0 /4	4	98 Verbinden
★ a						-	ð	(A) Bilduchieme
Demo						VPN	Nor Alarma	austein
**					Ungsburgs- trojpke Projskem	Ale Entellungen T	Pertnersk Ø Nor Alarma	

Fig. 12-36 Change own password

3. Select the network, you want to connect to.

С	Settings		Create Ne	w Configur	ation	System Configuratio	A 0040-0.00
z,	Ceneral			1	Name	Access	Werbunden, gesichert Eigenschaften
	Configuration Management	>	۲	1	Default	1.1	Trennen
	Network Settings			2	system3	•	G. Gesichert
¢.	Preferences			3	system1		Geschert
	About			4	system2		
	User Management						
3	★ a						Netzwerk- und Interneteinstellungen Diest zum Ändern von Einstellungen, Beispielsenise kan Verbindung in eine gestatete Verbindung geschlert were
F	Demo						4 4 10
<u> </u>	Advanced Settings	1					Flagsrap- Mobiler WLAN modes Hotpot

×

6

4. Press <Connect>.



Preferences About

Demo

Fig.12-38

5. A message informs that the network has been changed.



Connect to network

🗖 🛱 💼

ж. I	General			-		 Eigenschaften
Ē	Configuration Management	>	۲	1	Default	Trennen
	Network Settings			2	system3	Gesichert
<u>N</u>	Preferences			3	system1	
	About			4	system2	
I	User Management					
9	* a					Netzwerk- und Interneteinstellungen Dier zur Änders von Installungen Begülsweise kann eine Werlandung in eine gestättet Vorleindung gesichet werden.
¢	Demo	- 1				4 4 14
*	Advanced Settings	1				WAN Plagsmap Mobiler workin Hompot
	< , 이 배 📀		🔒 💼 🖪	9	٥	0 = 4



Process

6. Select <Create new configuration>.

0	Settings	0	nate Nev	e Configuratio	n System Conligu	ration		Apply
8	General			1.	Name	Access	SSID	Actions
<u> </u>	Configuration Management		•	1	Default			1
z	Network Settings							
2	Preferences							
,	About							
	Instruments							
3	Pump P 2.1L HPG A							
>	Pump P 2.1L HPG B							
	User Management				ь			
	* 4							
	Demo							
	Advanced Settings							
	Energy Options							

Fig.12-40 Create configuration

- 7. Name the configuration.
- 8. Confirm with <Apply>.

Settings		Create New Configu	ration	Apply Cancel
General		Natur	System 2,	
Configurati	on Management	Access to this configuration	admin 🖌	
Network Se	ettings		user1	
Network Se Preference	5	\$50	LAN	
About				ь
User Managerra	mt			
🔹 admin				
Demo				
user1				
Advanced Settle	spa			
Energy Opt	ions			

9. You see the new configuration in the list with name, access and SSID. You can edit or delete the configuration.

10. Go to SYSTEM CONFIGURATION and configure

your new system.

Fig. 12-41Edit new configuration



Fig.12-42 Configuration List

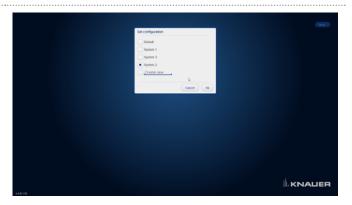
 INNALIER
 Image: Second Control of the seco

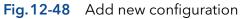
Fig.12-43 System Configuration

After selecting a configuration, the application connects automatically to the corresponding router and enables the communication with AZURA® devices.

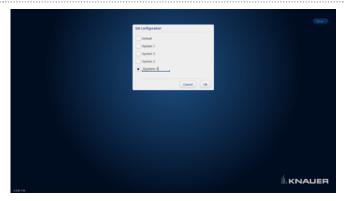
Pro	ocess	Figure		
1.	Open network connection which is showing all available networks.		Mobile Control	Correlations of the second sec
2	Select and connect to the desired network.	Fig. 12-44	Open network connect	10115
2.	Select and connect to the desired network.		Mobile Control	
		Fig.12-45	Choose network (syster	n)
3.	The tablet/laptop/PC is now connected to another network.		Mobile Control	Corr
		Fig.12-46	Connect with network (system)
4.	Select <change configuration=""> and enter the name of the new configuration.</change>		Mobile Control Vectore, admin Excelose terms To Control	
		Fig.12-47	Change configuration	
		<u> </u>		

5. Log in Mobile Control





6. A message informs that the network has been changed.



 Go to SETTINGS > CONFIGURATION MANAGE-MENT. The new configuration is listed with name, access and SSID. You can edit or delete the configuration.



Settings		Create Net	e Configuration	System Configur	ation		Apply
General			1.0	Name	Access	SSID	Actions
Configuration Management	>		1	Default	admin, user1		1
Network Settings			2	System 1	admin		/ ×
Preferences			3	System 3	admin, user1		/ ×
About			4	System 2	admin		/×
User Management		•		System 5	admin		1
* admin					D		
Demo							
user1							
Advanced Settings							
Energy Options							





12.4.2 Energy Options

In the energy options, single devices or a system can be put into standby mode and woken up from standby mode.

L KNA	LIER 👤 admin 🛛 🥙			F 0 6 1
) Settin	gs	Energy Options		Apply Cance
B General Con Pret Abo Instru	a figuration Management work Settings ferences ut nexts Pump P 6.1L LPG Pump P 2.1L HPG A Pump P 2.1L HPG B Aaragement admin	Energy Options System Time System Time System date and time to wake up instruments Instruments To Wake-up System Standby Set date and time to standby instruments Instruments To Standby	12 10 2022, 16 65 eff on 12 10 2022 16 65 All Selected Select Instruments eff on 12 10 2022 16 65 All Selected Select Instruments	Apply Cance
use Advan				5

Fig.12-51 Energy Options

12.4.2.1 Putting devices into standby mode manually

To put the device into standby mode manually, go to SYSTEM OVERVIEW and tap the STANDBY/POWER UP BUTTON **(**).

12.4.2.2 Putting devices into standby mode automatically

To put the system or single devices into standby mode automatically, go to SETTINGS > ADVANCED SETTINGS > ENERGY OPTIONS > SYSTEM STANDBY.

- 1. Tap the date and time buttons to enter the respective data.
- 2. To activate the standby mode, tick the check box.
- **3.** Activate one of the options under Instrument to Standby. ALL puts all devices which are part of the configuration into standby mode. Individual devices can be selected with SELECT INSTRUMENT. NOT ONE deactivates the standby mode for all devices.

12.4.2.3 Waking up devices from standby mode manually

To wake up the device from standby mode, tap SYSTEM OVERVIEW > STAND-BY/POWER UP BUTTON > POWER UP. Note the waiting period which the lamp of the detector needs to be ready for use. Find the necessary data in the user manual of the device.

12.4.2.4 Waking up devices from standby mode automatically

To put the system or single devices into standby mode automatically, tap SYSTEM SETUP · ENERGY OPTIONS · System wake-up.

- 1. Tap the date and time buttons to enter the respective data.
- 2. Under SYSTEM WAKE-UP, tick the check box.

Activate one of the options under Instrument to wake-up. Activating ALL wakes up all devices which are part of the configuration into standby mode. Individual devices can be selected with Select Instrument. Not one deactivates the wake-up functionality for all devices.

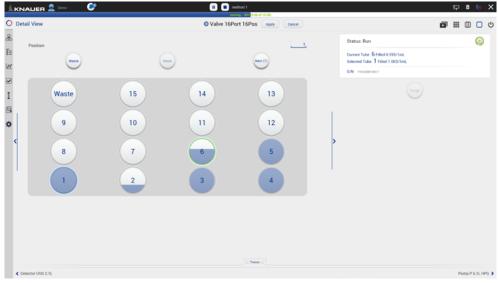
13. Special Features

13.1 Fraction Collection

Settings	Frac. Collector F	oxy R2		Apply Cano
General	Name	Frac. Collector Foxy F	Rack Configuration	
Configuration Management	Serial number	F0X00000000	Rack type	25 mm, 36 tub
Network Settings	Network Settings	23	Vial count Vial volume	
Preferences	Static		Volumetric Delay	
About	IP address	172.17.78.111	Fixed time	
Instruments			Tubing volume	
Frac. Collector Foxy R2	>		Capillary length0_	ID
User Management				
*1				
Advanced Settings				
Energy Options				

Fig. 13-1 Settings of fraction collector Foxy

In the settings of the device configured for fraction collection, the rack type can be selected and the maximum volume of the tube can be entered. The volumetric delay can be entered in three different ways: fixed time, tubing volume or capillary length and inner diameter.



13.1.1 Detail View



	јер 👤 🗠	🕐			unning 45% (4.59 of 10.00)		 	<mark>۵</mark> (5
letail \	View			O Valve 16	Port 16Pos Apply Cancel		₩ (
	Vial	Reason	Start Time	Stop Time	Volume (mL)	Status: Run		0
	od Start Time: 14.12							
	1	TIME	0.10	1.11	1.002	Current Tube 6 Filled 0.136/1mL		
2	2	SLICES	1.11	1.43	0.323	Selected Tube 1 Filled 1.003/1mL		
3	3	MANUAL	1.43	2.43	1.004	S/N Pvik200810017		
4	4	SLICES	2.43	3.44	1.002			
5	5	SLICES	3.44	4.44	1.004			
						>		
					Traces :::			

Fig. 13-3 Detail View of fraction collection device (table)

The Detail View of a device configured in the fraction collection block shows the Rack View with fill levels of the tubes (see Fig. 13-2) and a table with start, end time, volume of the fractions and the reason of the switching event (see Fig. 13-3).

Reset	With the reset of a rack the fill levels of all tubes are set to zero.
Collect/Waste	Switching between waste and fraction collection.
Next	The fraction collector/valve moves/switches to the next free, unfilled tube/position.
Purge (only for fraction collection valves)	The purge button automatically starts a method which can be individually created by the user.
Home (only for fraction collectors)	The fraction collector moves to the home position.

13.1.2 Method

1

Note: The fraction collection valve or the fraction collector is set to Waste at start/time 0 min of any method. Monitoring of fill levels of fraction collection tubes is only supported during methods.

KNALIER 👤 🚥 🛛 🕼) # 다
Methods > Add Method _method 1		(Save)
Settings Duent Delivery Sample Inj	ection Column & Periphery Detection Fraction Collection	
R. Valve 16Port 16Pos	Valve 16Port 16Pos - Position	2
Reports		
	System Configuration	
	Method	
	System logs	
	Results	
Exports		
	Data Rate traces	
	XY takes	
	HTML graph	
Fraction Collection		
	Signal	Detector UVD 2.15 - Signal
	Tew	Pump P 6 1L HPG
	After last vial	Waste & Continue method & Stop-gueue
	Reset rack on start	✓
Integration Parameters		
Detector UVD 2.1L - Signal	integration off	✓
	Negative peaks	
	Threahold	. 0.1
	Width	
	Misimum area	

Fig. 13-4 Method settings for fraction collection

Select the detector of the system configura- tion whose signal is monitored to trigger the threshold dependent fraction collection. Select the pump of the system configura- tion whose flow is used to calculate the time delay depending on the entered volumetric delay in the setting of the device configured in the fraction collection block. With the start of the method the rack is reset, and the fill levels of all tubes are set to zero. This function describes the behaviour during a method when the last vessel in the rack is filled. The method is paused with flow off and the
tion whose flow is used to calculate the time delay depending on the entered volumetric delay in the setting of the device configured in the fraction collection block. With the start of the method the rack is reset, and the fill levels of all tubes are set to zero. This function describes the behaviour during a method when the last vessel in the rack is filled. The method is paused with flow off and the
and the fill levels of all tubes are set to zero. This function describes the behaviour during a method when the last vessel in the rack is filled. The method is paused with flow off and the
a method when the last vessel in the rack is filled. The method is paused with flow off and the
rack is reset.
The rack is reset, and the fraction collection starts with the first position.
The fraction collection device switches to waste. The currently running method is con- tinued and a following method in the queue is not started/ the queue is stopped.
The fraction collection device switches to waste. The currently running method and queue are continued. The following method in the queue is started.
The currently running method is stopped but the following method in the queue is started.
The currently running method and the queue are stopped. The following method in the queue is not started.

			다 B G
Methods > Add Method _method 1		After last vial	Save
Settings Eluent Delivery Sample Inje R Value 16Pox 16Pox	ction Column & Periphery Detection Fra Value 16Port 16Pos - Position	Pause & Reset tack Pestet & Reset account Reset & Restart collection Waste & Continue method & Stop queue	ž
Reports	Bystem Configuration Method Bystem loga	Waste & Continue method and queue Disp method & Continue queue Disp method and queue Cancel Ox	
Exports	Aesults Data Rate traces		
Fraction Collection	XY traces HTML graph		
r Helden Contestan	Signal Flow After last vial Reser rack on start		Detector UND 215 - Signal Puring P. S. 13 - HPG Worke & Continue method & Situp genue
Integration Parameters Detector UVD 2 3L - Signal	integration off Registrice posts Thread-old		♥ □ 01,
	Width Missimum area		

Fig. 13-5 Choice of After last vial settings

13.1.2.1 Programming fraction collection in the method

Choose between two different fraction collection modes - position or peak recognition - which can be defined in each method line. The mode "position" in combination with the value "waste" ends fraction collection and the flow is directed into the waste.

-	method 1	Select fraction	collection mode	Save
Settings Eluent Deliver	ry Sample Injection Column & Periph			
Time	Instrument	Comman Peak Reco	ue ue	
0.00,	R Valve 16Port 16Pos	Positio	Cancel Ok Raste	
0.10, x	R. Valve 16Port 16Pos	Position	Waste	×
	R: Valve 16Port 16Pos		Waste	

Fig.13-6 Choice of fraction collection modes

In the fraction collection mode "position" the flow can be directed into the waste, the next unfilled tube, or a tube at a certain position. Under slices the maximum volume defined in the settings of the fraction collection device can be selected or any volume smaller than the maximum volume can be entered. As soon as the defined volume is reached, except for the waste position, the system switches to the next unfilled vessel. The waste does not have a maximum volume.

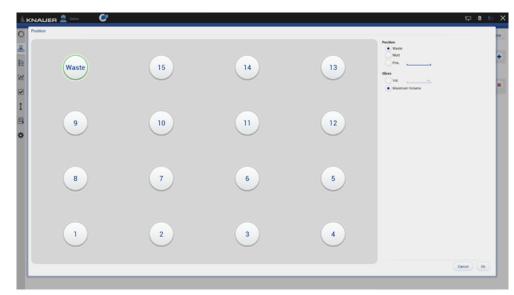


Fig.13-7 Fraction collection mode position in method

In the mode "peak recognition" the fraction collection starts with exceeding a threshold and stops after falling below a second threshold of the detector signal. Start and stop thresholds are defined by the user. Fractions are collected into the next unfilled tube or into a tube at a certain position. With the latter, it can be set whether either all fractions are collected pooled into the specific tube - All in - only available for fraction collection valves or a new tube is used for each newly detected peak/ exceeded threshold - Start from. The slices setting is described in the fraction collection mode "position". For fraction collectors, the "Move to" action moves the collector outlet to the entered position, but the waste/ fraction valve continues to direct flow to the waste.

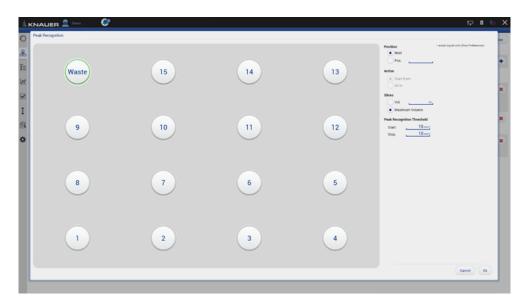


Fig. 13-8 Fraction collection mode peak recognition for valves in method

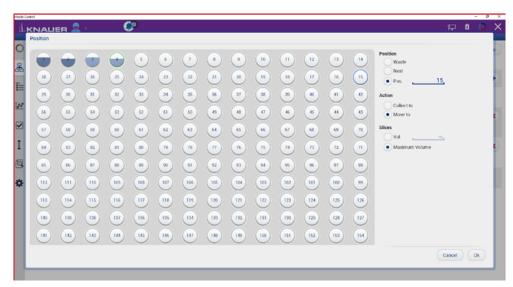
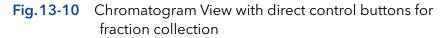


Fig.13-9 Fraction collection mode peak recognition for fraction collectors in method

13.1.2.2 Direct control during a running method

If allowed in the user management, the user can intervene in the fraction collection during the running method. If the device is in waste position, collection can be started or switched to the next unfilled tube. If the device is collecting, it is possible to switch to waste. The direct control event can be terminated via resume. After clicking the resume button, the following method lines for the fraction collection device are executed as described in the method.

me	ethod 2 2022.12.14_11-27-18		Resurre	Waste Collect (1) Next (2)) (
	mAU 0.11				
	1.4				
	12				
	1				
	0.0				
	0.5				
	0.4				
	0.2				
	Constant SAG 2 Turi layout di SAG				
	42				
	44				
	45				
	4.8				
	4				
	-1.2				
	14				
	-1.6				10





14. Data Viewer

Note: Chromatograms can be revisited with the Data Viewer which is installed together with Mobile Control. A separate activation of the Data Viewer is not necessary.

Process

 Press the button on the upper right side of the screen or open the software via the desktop icon. A new window opens.

Figure



Fig. 14-1 Open Data Viewer

2. Data Viewer is loading.



14.1 Load a chromatogram

Figure

- **3.** The interface is similar to Mobile Control Interface.
- **4.** Select <Choose file> to load a measurement into the Data Viewer.

Fig. 14-3 Data Viewer - Overview

hoose file									
iser	Sample ID	From:	т.	·	- Film (h	set			
to .	D'Projects D	c b o b		DX DA	DT DU	DV DW D	x Dx	- In A	=
M 1,2022.10	13,10-04-21.65								

Fig. 14-4 Data Viewer - Select run





Note: The selection of traces in the chromatogram view of Mobile Control is saved in the result file. The Data Viewer shows the chromatogram in the same view as it was recorded in Mobile Control.



Note: The data format of Mobile Control result files is *.h5.

Process

126

Mobile Control 6.0, Software instructions (V6851-3)

 Select a result file (.h5) and confirm with <OK>. By default, Mobile Control saves all result files in C:\Mobile Control\Projects\ Project folder*\Results\Queue_date_time.

* The project folder is named default or can be renamed in Mobile Control settings > user management.

6. The chromatogram is displayed.

14.2 Chromatogram window



Fig. 14-6 Chromatogram - Overview

Legend

 Methods and Sequences 	Displays the details of the method, the integration parameters for analysis and the system configuration. Further, there is the option to create reports and to export the traces.
② Settings	Change the appearance of the chromatogram or the units of the traces. Information about the Data Viewer is displayed.
③ Export	Export selected traces to PDF or HTML.
④ Settings	Chosse between Normalization, Second y-axis and Overlay (refer to Fig. 14-7)
5 Traces	Select the traces to be displayed in the chromatogram.
	Detector signalAuxiliary tracesMethod traces
6 Close files	Select one, all or a selection of chromatograms to be closed.
⑦ Choose file	Load a chromatogram. If another chromatogram is open, it will be displayed together with an already loaded chromatogram.



Fig. 14-7 Chromatogram - Overview - Settings

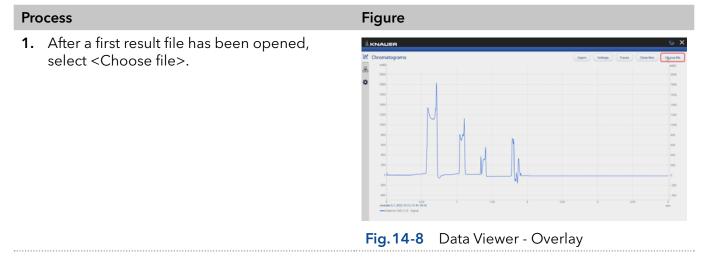
Legend

i

 Normalization 	Traces can be normalized to other traces. This function allows you to normalize one or more chro- matograms to the first chromatogram, adjusting the heights such that the apex height of a selected peak matches that of the peak selected on the first trace.
② Second Y-axis	For one of the active traces a 2^{nd} y-axis can be added. The 2^{nd} y-axis on the right shows the unit and the scale for the selected trace. The trace is automatically normalized.
③ Overlay	Set an offset for the x-axis/time and the y-axis/signal.

Note: The chromatogram window of Data Viewer is similar to Mobile Control. Regarding the functions of this view please refer to chapter 8.

14.2.1 Overlay of two measurements



- 2. Select the second result file.
- **3.** Confirm with <OK>.

diagram.

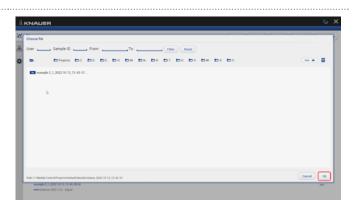
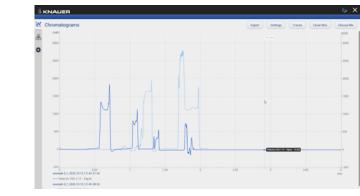
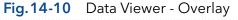


Fig. 14-9 Data Viewer - Overlay





5. If you want to close chromatograms press "close files" and select one, all or a selection of chromatograms. Confirm closing the files by ok. Alternatively, close single chromatograms in the method menue of the individual measurement.

4. Both chromatograms are displayed in the

6. Select <Close>.

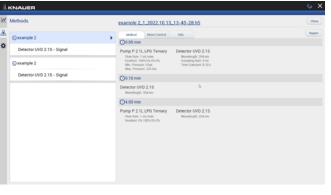


Fig. 14-11 Data Viewer - delete measurement

14.3 Methods

ıl.	KNALLER		© ×
	Methods	example 2_1_2022.10.13_13-45-28.h5	Clase
&	🕞 example 2 >	Method Direct Control Info	Report
۵	Detector UVD 2.1S - Signal	Pump P 2.1L LPG Ternary Detector UVD 2.1S	
	🕓 example 2	Flow Kate: 1 mL/min: Wavelength: 254 nm Gradient: 1003;0%:0%:0% Sampling Rate: 5 Hz Min: Pressure: 0 bar Time Constant: 0 20 s Max: Pressure: 225 bar	
	Detector UVD 2.1S - Signal	⊙0.10 min	
		Detector UVD 2.1S Wavelength: 354 em	
		©4.00 min	
		Pump P 2.1L LPG Ternary Detector UVD 2.1S Flow flate: I mL/min Gradeed: 0%: 100%:0%: 0%: Variable: 0%: 0%: 0%: Detector UVD 2.1S Wavelength: 256 nm	

Fig.14-12 Methods

The file name is linked to the folder including the result file.

Choose the sections System Configuration, Method, Results and System logs to be included in the report. The results of the chromatogram analyis, as well as the traces of the chromatogram can be exported in ASCII format. Choose between export of signal values strung together or as a pair of time and signal value. The chromatogram is exported as html file. The report and the exported files are saved in a separate folder which is created in the folder of the result file.

Method comands, direct control events, method settings, system configuration and logs are summarized in sorted tabs.

14.3.1 Integration Parameters

Each detector signal can be analysed. It is possible to define separate integration parameters for each trace.

Methods		Integr	ration				(Auto Integra	tion	Manual Integra	tion	્ક
• example 3		#	RT	ĸ	A	A%	н	HN	TF	W _{0.5}	Р	1
Detector UVD 2.1S - Si	and l	P.	0.53	0	-24.241	-3.56	0.588	0.06	0.02	0.1	-1	
Detector UVD 2.15 - SI	gnai	2'	0.99	0.85	-3.857	-0.57 246 9	0 1049.825	0 99.94	0	0.02	-1	
🕟 example 2		4"	1.41	1.67	-910.991	-133.67	0	0	-1	0	-1	
Detector UVD 2.1S - Si	gnal >	5*	1.77	2.33	-62.111	-9.11	0	0	0	0	-1	
					Þ							

Legend

- Auto Integration
 Automatic configuration of the integration parameters
- ② Manual Integration Manual configuration of the integration parameters
- ③ Save the integration parameters.

If you move the mouse over the column labels in the table header, the full name of the result value will be displayed.

The following result values are calculated during the analysis:

- Peak number
- Retention time
- Cap factor
- Peak Area
- Peak Area [%]
- Peak Height
- Peak Height [%]
- Asymmetry
- Width at half height
- Platen numbers
- Resolution

Two Integration events are required for each run: Width, and Threshold. These parameters are used to detect peak start, stop, and apex, and to distinguish true peaks from noise.

Width

The Width is used to calculate a value for smoothing, the data points before the integration algorithm is applied. In most circumstances, an initial Width value based on the narrowest peak in the chromatogram will be adequate for proper integration of all peaks.

Threshold

This parameter is the first derivative, used to allow the integration algorithm to distinguish the start and stop of peaks from baseline noise and drift. The recommended Threshold value is based on the highest first derivative value determined in that section of the chromatogram.

Minimum Area

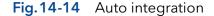
The Minimum Area parameter is used to reject unwanted peaks in the chromatogram. A value of e.g. 1000 will omit all peaks with an area of smaller than 1000.

After entering of integration parameters and pressing the apply button the chromatogram will be re-processed and analysed. The integration table will be updated automatically.

14.3.1.1 Auto integration

Start an automated integration by entering values for threshold, width and minimum area. The section of the chromatogram which is supposed to be auto integrated can be limited by entering two time value "from" and "to". Deselect "integration off" and start automated integration with pressing "ok". Include negative peaks by ticking the checkbox.

Methods	In Auto Integration			Auto Integra	stion _	Manual Integra	saon	0
🕒 example 3	Threshold		н	H%	TF	W _{0.5}	Р	
	Width	0.1	0.588	0.06	0.02	0.1	-1	
Detector UVD 2.1S - Signal	Minimum area		0 1049.826	0 99.94	0.12	0.02	-1	
🕼 example 2	Integration off	~	0	99.94	-1	0.07	-1	
Detector UVD 2.1S - Signal		✓	0	0	0	0	-1	
Detector 070 2.13 - Signal	From							
	То	4.000mm,						
	Negative peaks							
		Cancel Ok						



14.3.1.2 Manual Integration

Start and end points of peaks can be defines manually by selecting "Add Peak". The first point set in the chromatogramm is the start of the peak the second point the end of the peak. Several peaks can be defined. Set an perpendicular drop to divide the selected peak into two peaks. By selecting "Remove peak" single peaks can be removed.

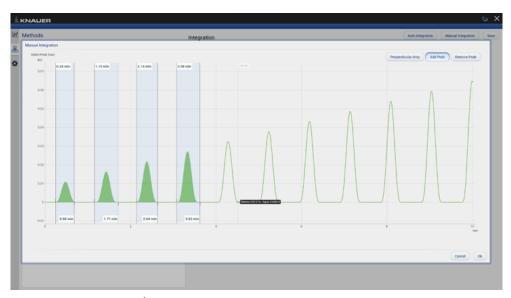
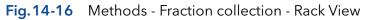


Fig.14-15 Manual integration

14.3.1.3 Fraction collection

The submenu Fraction Collection in Methods shows the Rack View of the run and a table with start, end time and volume of the fractions.

							ΘX
Methods		Fra	raction Collection				
Cotest Cotest Detector UVD 2 Detector UVD 2	15 - Signal		Position 6: Filled 0.77/1mL Waste	15	14	13	
Fraction Collect	ion	*	9 8 1	10 7 2	11 6 3	12	,



lethods	F	Fraction Co	llection					
🕓 test			Vial	Reason	Method Start Time	16.12.2022, 13.56.24 Stop Time	Volume (mL)	
Citest			1 I	MANJAL	o.os	0.20	0.127	
Detector UVD 2.1L - Signal		1	1	MANJAL MANJAL	0.08	0.20	0.127	
		3	3	MANUAL MANUAL	1.23	2.23	1,000	
Detector UVD 2.15 - Signal		4	4	OVERFILL	2.23	3.23	1.002	
		5	5	OVERFILL	3.23	4.24	1.000	
Fraction Collection	>	6	6	OVERFILL	4.24	5.01	0.770	



14.4 Settings

14.4.1 Appearance

					e
1	Settings	Appearance			Apply Cano
5	General	Annotation 1	Peak area		
	Appearance >	Annotation 2	Peak number		
1	Preferences	Grid			
	the set	Baseline	✓		
	About	Fill peak area	✓		
				D.	

Fig. 14-18 Data Viewer - Settings - Appearance

The appearance of the chromatogram can be adapted in the settings window. For each peak two annotations can be chosen from the result values which are displayed in the chromatogram. The following check boxes are available:

- Grid: Activate or deactivate
- Baseline: Hide or unhide
- Fill peak area: The area below the integrated peak can be filled with solid color

14.4.2 Preferences

This chapter describes how you can change the units of the traces. Always confirm your selection with <Apply>.

Pressure Units Selection between bar, MPa and psi.

System Detector Units Selection between AU, mAU, μ AU (UV detectors), mRIU, μ RIU, nRIU (RI detectors).

Temperature Units Selection between degrees Celsius °C and degrees Fahrenheit °F.

14.4.3 About

The version of the installed Data Viewer is shown.

15. Firmware Wizard

Note: Installation of the Firmware Wizard is a separate installation step. Activation of the software is not necessary

The Firmware Wizard can be used to:

- Change LAN settings. If supported by your PC a direct LAN connection with selected devices can be used. Otherwise use a switch/router. Please find a list of AZURA[®] devices with corresponding firmware versions below in chap. 2.3.
- Update firmware of connected devices.

You can download the firmware wizard form our website. It is included in the Mobile Control download folder. For download instructions, please refer to chap. 3.1.

15.1 Reset LAN settings

Please refer to Table 13-1 for the minimal firmware versions of the device and the version of the Firmware Wizard. The LAN settings can be changed for AZURA® devices with the listed or higher version.

Process Figure Open the software. Select <Reset LAN Settings...>. A new window opens.

- **4.** Enter the serial number or the MAC address of the AZURA[®] device.
- 5. Select
 - fixed IP address (enter IP address, subnet mask, and default gateway) or
 - DHCP (obtain an IP address automatically).
- 6. Press <Reset Conn. Settings>.
- **7.** We recommend a restart of the devices, to accept new LAN settings.



SN: n/a		Do not update this co	mponent	IP Address:	127.0.0.1
Current version: n/a	Device connection settings	×		IP Port:	10001
	Target device serial number: © Obtain an IP address automo Use the fallowing IP address: P address: Subret mark: Default gatewayr Cancel Reset				Do not reconn Start



15.2 Update firmware version of connected devices

This chapter contains detailed information on how to perform an update of all possible firmware components for the various devices.



Note: The firmware update of other KNAUER devices (Smartline, Blue-Shadow) is possible but not fully supported. In case of issues please contact KNAUER.

Device type	Туре	Firmware upload via LAN	Minimum required firmware version	Change LAN settings
Assistant	AZURA® ASM 2.1L	LAN	V1.18	\checkmark
	AZURA® ASM 2.2 L	LAN	V1.14	\checkmark
Column Thermostat	AZURA® CT 2.1	only via RS-232	V1.06/V2.02	√*
Detector	AZURA® RID 2.1L	LAN	V1.24	✓
	AZURA® UVD 2.1L	LAN	V2.06	✓
	AZURA® DAD 6.1L	LAN	V1.26	✓
	AZURA® DAD 2.1L	LAN	V1.12	✓
	AZURA® MWD 2.1L	LAN	V1.12	\checkmark
	AZURA® UVD 2.1S	LAN	V1.14	\checkmark
	AZURA® CM 2.1S	only via RS-232	V1.07	√*
	BlueShadow 40D - ADI01, ADI04	LAN	V2.05	keypad
	BlueShadow 50D - ADJ01, ADJ11	LAN	V2.18	keypad
Pump	AZURA® P 6.1L	LAN	V1.07	\checkmark
	AZURA® P 2.1L	LAN	V1.09	✓
	AZURA® P 2.1S	only via RS-232	V1.38	√*
	AZURA [®] P 4.1S	only via RS-232	V1.38	√*
	BlueShadow 40P - APC30XX	LAN	V1.12	keypad
	BlueShadow 40P - APC40XX, APC60XX	LAN	V2.30	keypad
	BlueShadow 80P - APD30XX, APD60XX	LAN	V2.26	keypad
	BlueShadow 80P - APD20XX	LAN	V1.08	keypad
Valve	AZURA [®] V 2.1S	no	V5.01	√*
	AZURA® V 4.1	no	V6.22	\checkmark

Firmware Wizard V1.03.000.419 or higher

Table 13-1List of AZURA® devices with minimal required firmware versions for firmware upload or
change of LAN settings.

* Changing LAN settings by entering the serial number requires that the device has been found by Firmware Wizard after browsing. Changing LAN settings by MAC address does not require that the device has been found after browsing. The IP address can be part of another network.



Note: Do not disconnet or disturb the connetion to the device during firmware upload.

Process

- 1. Open the software.
- **2.** Ensure to be connected with the network which includes the device.
- **3.** Select <Browse>. A new window is opened.

Unberannt - Kneuer Firmu	ere Weerd [113.0.111]		Correction = Brower	- 0 >
Denka	Seat An Seat Construments	Al Dev Hendel Devel Deve opdate Te composition anners server with	An Interface: LAN V	
71 01 2717 10 % 14 xxx Per	an a	ron († 1811) in stelling Hells, World		

Fig. 13-3 Menu Firmware Wizard

- **4.** Select <Browse>. A list of connected devices is displayed.
- 5. Select the device you want to update and press <Select>.

	Current versen: e/a	Stowed Assoc	n/a	P Address	122.17.1.128		
					Connect		
	Browner for devices			_		×	
	Connection: Law	PPH 101	Rd-202 US			Select	
	Serial Number	Device Type	Connected at	Fill Version	Forted at		
	¥1111	Middle-date	LAN: 172.17.1.110.9008	05.01		Distance	
	42 HE13400001	Pump NUS	LAVE 172-17.1.125(10001	01.04		Cleve	
	FB:= 53300001	Pump PLN	LAN: 172.17(1.545)30001	01.04		U III	
	POG15120802	MWD 2.1L	LAN: 172.17.1.324(1000)	01.10			
	5 FO/ 4180001	DAD 5.16	LANE 172-17-1-542-90001	01.23			
	FOU140108002	DAD 2.15	LANE 172.17.1.118/10001	01.30			
	FR.2.154800004	Ri Detector 2.%	LAN: 172-17.1.321-10001	01.15			
	6				,		
01710561439940	Looking for devices						

C 🔚 🔕 🏟 🔟 🕻

Fig. 13-4 Select device

C Zur Suc

6. Press <Connect>.

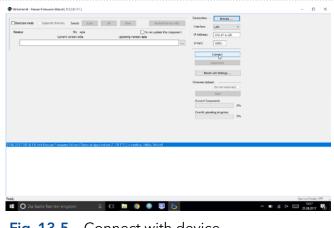


Fig. 13-5 Connect with device

- 7. After successful connection you see a status message in the lower part of the screen.
- 8. In this example the firmware wizard is connected with a pump.
- 9. Check the displayed current firmware version.
- 10. Press the shown button to import the update file.
- 91 FEE134800

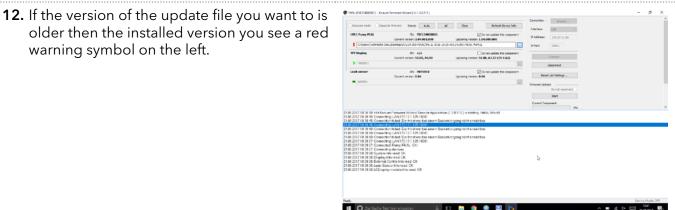
11. Import the update file.

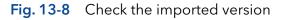
warning symbol on the left.

Fig. 13-6 Connect with device

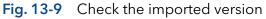
Bootcare mode Esparate travara friend	Auto Al Oese Refinsh Device Selo	Convertion:	
HPLC Pump PEBL Six FBCS Gament versions 1.04.4	34800001 Donet update the component 05.000 Upcoming version #/a	19 Address 172, 17, 5, 129	
	😨 Othan	×	
TFT Display Sic n/a Current versions S6L80	← → + ↑ □ = Desitep > V0154.001-P005D > = ↓ ↓		
	Organisieren • Neuer Ordner	10 × 01 O	
Leak sensor the 987	Bildschimdetes A Name	Anderungsdatum Typ	
Carrent version: 8.84	screenshots	21.08.2017 Nr58 Datalende	
	Chedhile PS.IL-20(6-11-25-V01.04.001-P003	0.6x0. 25.11.2016-10.21 PWP6IL-1	
	💻 Dieser PC		
	MI Didder		
	Destrop		
	Columente		
	Downloads		
	Munik		
	Windows (C)		
01 2017 10 56 14 300 Kennust Fermenre Worked See	Beterame P6.11-2016-11-25-W01.04.003-P0050 -	Inchroment Fernward Rids If do 1	
012017101743 Convecting: LAN 17217112510 012017101743 Convected Pump P61L: 040 012017101743 Convected Pump P61L: 040	Million (1977-2014-11-20-901-1980)	Officen Abbrechen	
00 2017 10 57 43. Systeminida need, DK. 01 2017 10 57 44 Disglay, Hito need, DK. 01 2017 10 57 44 Externet Control Hito need, DK. 02 2017 10 57 44 Externet Control Hito need, DK.			
05 2017 10 57-44 LCD replay models into read ICK			

Import the update file Fig. 13-7



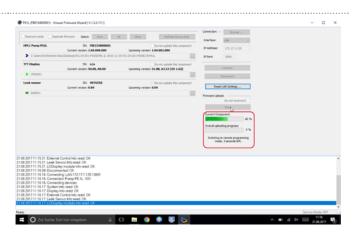


🛤 🌍 🧕 🖾 🕤



- 13. If the version of the update file you want is newer then the installed version you see a green arrow on the left. You can decide which devices should be updated and which not, by activating the checkbox "Do not update this component".
- 14. Press <Start>.

15. You can observe the update process on the lower right side of the screen.



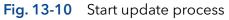




Fig. 13-11 Finished update process

🖿 💿 🍥 🗷 🛛

- 16. After successful update process, a status message is shown.
- **17.** Press < Disconnect>.

When the upload is complete and successful, a green tick on the left side of the component line will be shown. The Firmware Wizard can be closed.

18. We recommend a restart of the devices, to accept new LAN settings.

16. Troubleshooting

If you are facing problems with the operation of Mobile control, follow the steps below

Steps

- **1.** Restart of Mobile Control.
- 2. Restart of Tablet, Devices, Router.
- **3.** Check Windows settings (Firewall, Defender, overdue Windows Updates). Find more information in the release notes.
- 4. Remove system configuration and create a new one.
- 5. Delete C:\MobileControl (or rename the folder to keep the data) and create a new user (new activation of Mobile Control).
- **6.** Uninstall Mobile Control and delete C:\Mobile Control. Install Mobile Control again. Activate the software using the activation code.
- 7. Contact Customer Support providing following information:
 - Versions of firmware, Mobile Control; Make screenshots
 - Activate Mobile Control Communication Logs (refer to chapter 11.1).
 - Reproduce the Mobile Control issue and provide the log files.
 - Check Windows Event Viewer.

17. Repeat Orders

This list for reorders is valid for the time the document has been published. Deviations afterwards are possible.

For reorders of spare parts use the enclosed packing list. Contact the Technical Support in case there are any questions on spare parts or accessories.

Further information Further information on spare parts and accessories can be found online: <u>www.knauer.net</u>

	Descriptions	Order No.
Documents	Software instructions	V6851-3
	Installation information	V6858
	Mobile Control Certificate	V9610
Mobile Control	Mobile Control license Display - with tablet, without data acquisition, Windows Pro	A9607
	Mobile Control license Data - with tablet, with data acquisition, Windows Pro	A9608
	Mobile Control license Display - without data for Windows	A9610
	Mobile Control license Data - with fraction collection, with data acquisition for Windows	A9612
	Mobile Control license FRC - with fraction collection, with data acquisition for Windows	A96131
	Mobile Control license FRC - with tablet, with fraction collection, with data acquisition, Windows Pro	A96132
	Upgrade license Mobile Control to Data - A9612	A9614
	Upgrade license Mobile Control to FRC - A96131	A96141
Tools	Mobile Control Mount flexible tablet mount for 7"-12" tablets	A9617
	USB-LAN ADAPTER Network adapter for tablets USB 2.0 <-> 10/100 Ethernet including LAN cable	A96181
	WLAN Router, 8-port Gigabit RJ-45	A64809
	WLAN Router with international power supply with plug, 8-port Gigabit RJ-45	A64809INT
	Single device WLAN router for Mobile Control 1xRJ45, 10/100 MBit, WLAN, WLAN router for single devices	A64811
	Tablet Lock with stand, SecuPlus Tablet Lock (silver)	A9615

APPENDIX A Configuration of flow and pressure



Note: Please read the corresponding technical documentation for handling and safety reasons.

Note: When a constant system pressure is necessary, the pumps P 2.1L and P 6.1L can be set to isobar / constant pressure mode. The isobar (P 2.1L) and constant pressure (P 6.1L) modes were developed under standard HPLC conditions with standard system components. The parameters for pressure control are stored in the pump's firmware and cannot be modified by the user.

What's new? With the actual version of Mobile Control it is possible to obtain a constant pressure by varying the flowrate.

A 1.1 Minimum flow rate and maximum flow rate

Time out

The default time out is 30 s. If the pump does not reach the target pressure it will stop after the time out period and a message appears.

Minimum flow rate



Note: If you are not familiar with the system, do not change the parameters.

NOTICE

Device defect

When flow rate decreases below the minimum value, the following error message is displayed: **Unable to attain min. flow setpoint**

The software program stops, but the pump is continuing to work.

 \rightarrow For safety reasons, stop the pump manually.

Target pressure

Pressure which should be reached. Set this parameter to the required pressure

NOTICE

Device defect

When the pressure falls below/exceeds the target pressure, the following error message is displayed: **Unable to attain pressure setpoint.**

The software program stops, but the pump is continuing to work.

→ For safety reasons, stop the pump manually.

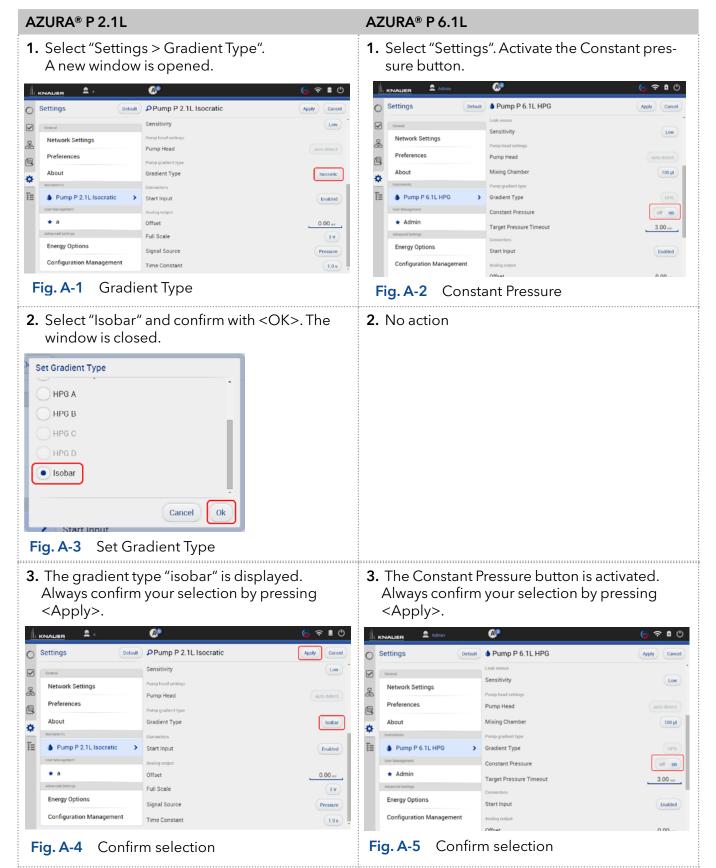
Minimum pressure $\boldsymbol{p}_{_{min}}$ and maximum pressure $\boldsymbol{p}_{_{max}}$

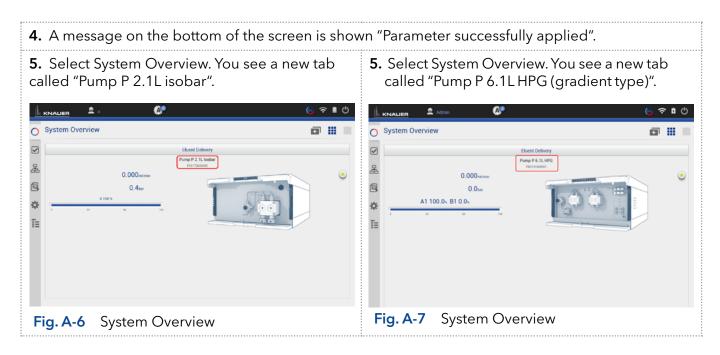
Max. pressure is preset in accordance to p_{max} of the pump head. When p_{max} is reached, the pump stops automatically (safety function). Min. pressure is preset. When p_{min} is not reached, the pump stops after approx. 30 s.



Practical tip: If your column is very sensitive to pressure increase, you can lower the preset p_{max} .

A 1.2 Configuration





Next steps Set the required parameters.

There are two different possibilities, explained in the next chapters (please refer to chap. A1.2.1 or chap. A1.2.2).

A1.2.1 Direct control

AZURA® P 2.1L AZURA® P 6.1L 1. Select "Overview" and click on the pump 1. Select "Overview" and click on the pump picture to enter the Detail View menu. picture to enter the Detail View menu. A A ∎ © O System Overview o II = 0 System Overview o II I Eluent Deliver mo P 6 1L H mp P 2.1L I 욿 * 0.000 0.000 ۲ ۲ 2 2 0.0bm 0.4tm A1 100.05 B1 0.05 ☆ ☆ īΞ E Fig. A-8 Direct control Fig. A-9 Direct control

<list-item><list-item><code-block></code-block></list-item></list-item>	<text><list-item><list-item><list-item></list-item></list-item></list-item></text>
	Fig. A-11 Set parameter

4. The pumps start with selected configuration.

i

Note: In this method you cannot monitor pressure and flow. Use the program sequence to monitor pressure and flow (explained below).

A1.2.2 Control via program sequence

AZURA® P 2.1L	AZURA® P 6.1L					
i Note: With this method, you can monitor pressure and flow rate.						
 Select "Programs > Add a program". Select "Programs > Add a program 						
Parameters are preset as default.	Parameters are preset as default.					
Fig. A-12 Add a program	Fig. A-13 Add a program					

μ.		@•	🌀 रे 🛯 (
0	Programs > Add Program	er program name	Save Cano
	Settings Eluent Delivery		
-	Start of run settings	Autozero at start	
& @		Waiting for trigger	
9		Waiting for temperature	
⇔	End of run settings	Standby	
ī≡		Flow off	
. –		Lamp(s) off	
	Auxiliary traces Pump P 2.1L Isobar	Pump P 2.1L Isobar - Pressure	
		Pump P 2.1L Isobar - Flow	
	Reports	System Configuration	
		Mathod	

2. Activate the checkboxes to monitor pressure and flow.

Ť		dmin	@		💿 ବ 🗅 🖑
0	Programs > Add	Program	Enter program n	ame	Save Cancel
	Settings	Eluent Delivery			
	General			Run Time	10
& @	Start of run settings			Autozero at start	
2				Waiting for trigger	
¢				Waiting for temperature	
Ē	End of run settings			Standby	
				Flow off	
				Lamp(s) off	
	Auxiliary traces	Pump P 6.1L HPG		Pump P 6.1L HPG - Pressure	
				Pump P 6.1L HPG - Flow	
	Reports				
F	ig. A-15	Auxi	liary tra	aces	

Science with Passion



Latest KNAUER instructions online: www.knauer.net/library

KNAUER Wissenschaftliche Geräte GmbH Hegauer Weg 38 14163 Berlin Phone: Fax: E-Mail: Internet: +49 30 809727-0 +49 30 8015010 info@knauer.net www.knauer.net

© KNAUER 2022