



HELMED®

ADAPTS TO YOUR LAB NEEDS

INSTRUCTIONS FOR USE

- for HELMED® IFA: BLOT Upgrade Kit REF.HEL-8002 -



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1 Intended Purpose

The **HELMED® IFA: BLOT Upgrade Kit (REF.HEL-8002)** is an extension module for the **HELMED® Automated IFA Processor**. It enables processing of **AESKUBLOTS®** assays produced by Aesku.Diagnostics GmbH & Co.KG. To utilize **AESKUBLOTS®** kit components and reagents, the system requires the blot carousel (tray holder ring), a cam disc, two reagent racks and a sample rack in combination with the software provided. The device is intended for professional use only.

To use the **HELMED® BLOT Software**, a complete **HELMED® IFA Processor** is required. This consists of the following components: **HELMED® IFA Processor**, PC (not included) and printer (not included).

The system automates the processing of **AESKUBLOTS®** tests. The **HELMED® BLOT Software** has been evaluated and validated for use with **AESKUBLOTS®** kits. Aesku.Systems GmbH & Co.KG is not responsible and will not accept liability for processing of line immunoassay kits from other providers. For interpretation of **AESKUBLOTS®** tests the **AESKU.SCAN®** software is available.

Note: For further information and warning notes concerning the **HELMED®** instrument, please refer to the "Instructions For Use" for the **HELMED® Automated IFA Processor**.

Note to the user (European Union):

Any serious incident that has occurred in relation to the device shall be reported to the manufacturer and the competent authority of the Member State in which the user and/or patient is established.

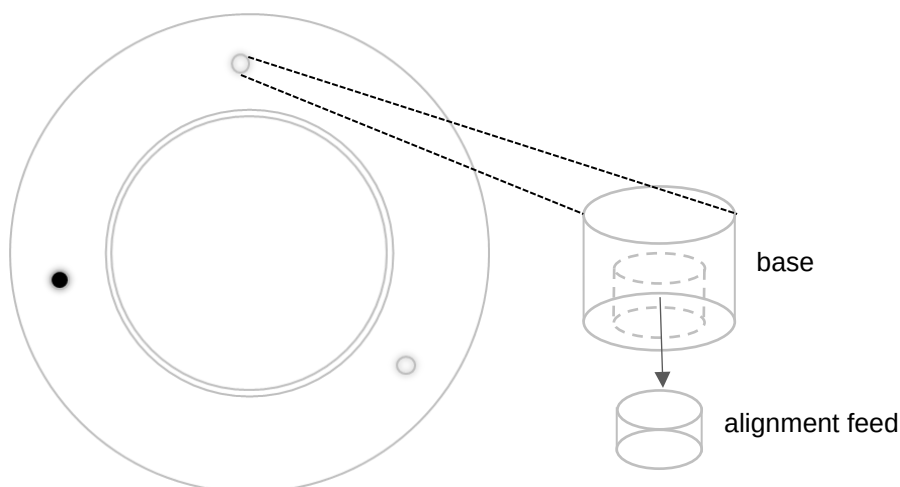
2. Remove the racks, which are positioned in the outer ring of the device.
3. Remove the slide holder ring (middle ring).

Clean this part of the device before you run the next steps. Aesku.Diagnostics GmbH & Co. KG recommends that this part of the device should be cleaned regularly.

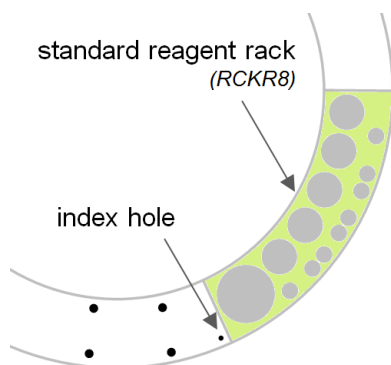
4. Position the cam disc on the inner ring. To do this, align the numbering on the ring with that on the disc (see figure).



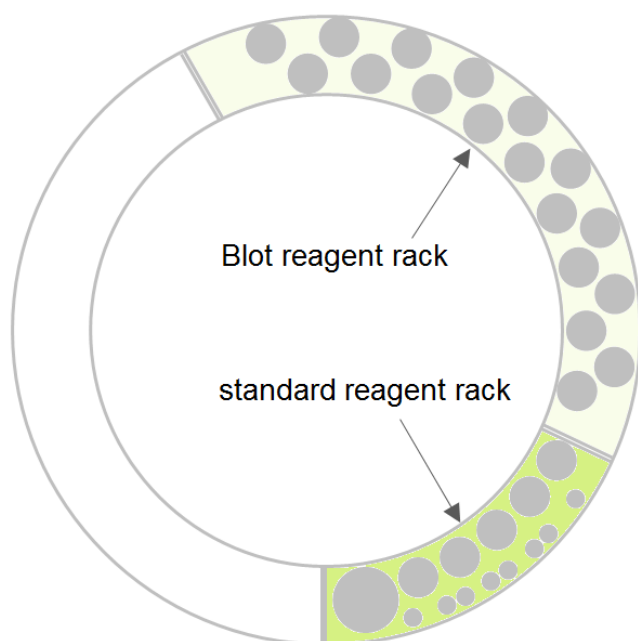
5. Position the tray holder ring on the middle ring. Please note the color coding of the two parts (see figure). Align the black foot with the black mark and white feet with the white marks.



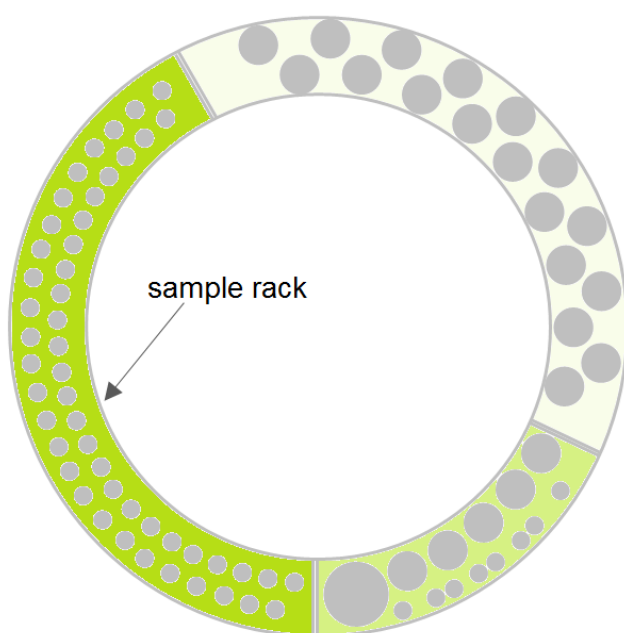
6. Place the standard reagent rack (RCKR8) on the outer ring to the right of the index hole.



7. Place the BLOT reagent rack to the right of the standard reagent rack



8. Place the sample rack to the left of the standard reagent rack.



9. Make sure that the wash bottles are connected correctly. Please also refer to chapter 2.1.4.

2.1.4 Connections

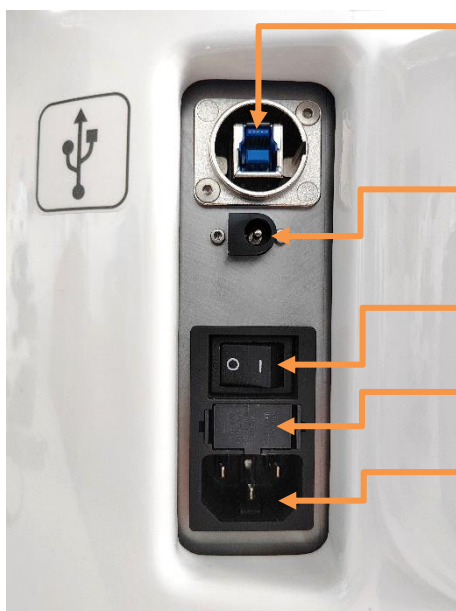
The connections are described thoroughly in the IFU for the **HELMED®** Automated IFA Processor. Below is a brief overview.

Electrical connections and connectors for the system bottles are located at the back of the device.

Electrical connections

Connect the device via an USB cable to the PC. For this, use the USB port on the top left back of the device.

Connect the device via the power cord.



USB Port: Use the provided cable and connect the PC to the device by using the USB 3.0 Type B port located at the left backside of the **HELMED®** instrument.

24V DC out: To be used for REF.HTC-1001 only!

Power switch: To turn on/off the device.

Fuse slot

Main power inlet: The power inlet is located at the left backside of the instrument. The provided power cord must be connected here.

Connections for the system bottles

Connect each system bottle to its color-matched connector. Connect "Wash #1" to the bottle with distilled water for processing the **AESKUBLOTS®**.

Connect the red bottle with wash buffer to "Wash #2".

The third port is for the liquid waste bottle. Please empty and clean the bottle regularly.



Wash #1: distilled water

Wash #2: wash buffer

Waste: liquid waste

Note: **AESKUSLIDES®** and **AESKUBLOTS®** do not use the same connection for distilled water and wash buffer.

2.2 HELMED® BLOT Software

2.2.1 PC Requirements

For proper installation and performance of the **HELMED®** BLOT software package on a PC not provided by Aesku.Diagnostics GmbH & Co. KG, the following minimum hardware specifications for PC are recommend:

- Intel® Core™ i3-9100 processor or higher
- 256 GB disc space or higher
- 8 GB RAM
- 1080p (Full HD) resolution display (1920x1080)
- Microsoft® Windows 7 (32/64-Bit)

Note: Do not use USB hubs when working with the **HELMED®**! Usage of USB hubs is not recommended by Aesku.Diagnostics GmbH & Co.KG. Power supply for each port can be interrupted when too many USB accessories are plugged in. Please use all available ports of your computer instead of a USB Hub.

Warning:

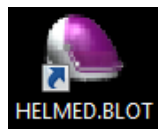


Connecting and disconnecting any device via USB port should be avoided during the run. This may lead to misconnection of the machine and run stop.

2.2.2 Software Installation

Insert the **HELMED®** BLOT USB stick in the USB port of the PC. Start the installation programm “SetupHemedBlot_<Version>” on the USB stick. Accept the default options and follow the instructions as they are displayed.

A **HELMED®** BLOT icon will be installed on the desktop:

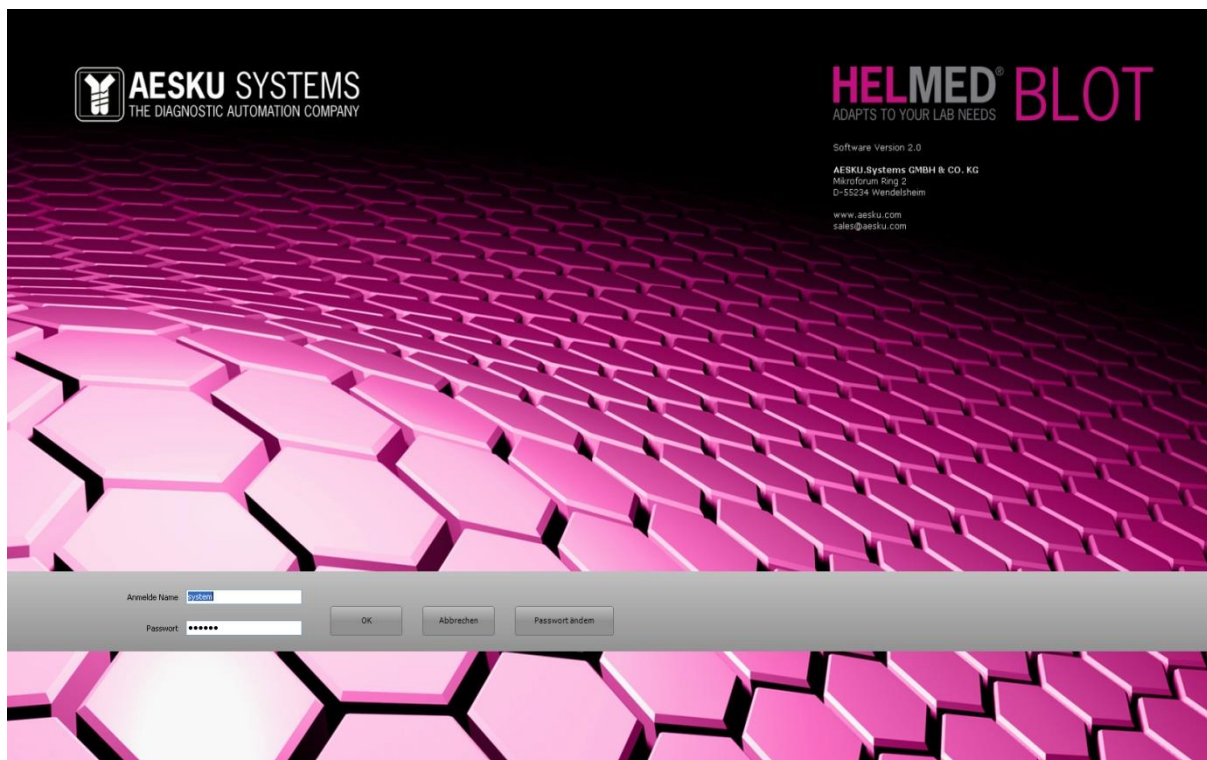


The installation setup is optimized for Windows 7 (64 bit). With other operating systems, manual changes may be necessary.

3 Software Overview

3.1 Start program and log in

1. The program is started by double clicking on the desktop shortcut. The HELMED® BLOT program opens with the login page.



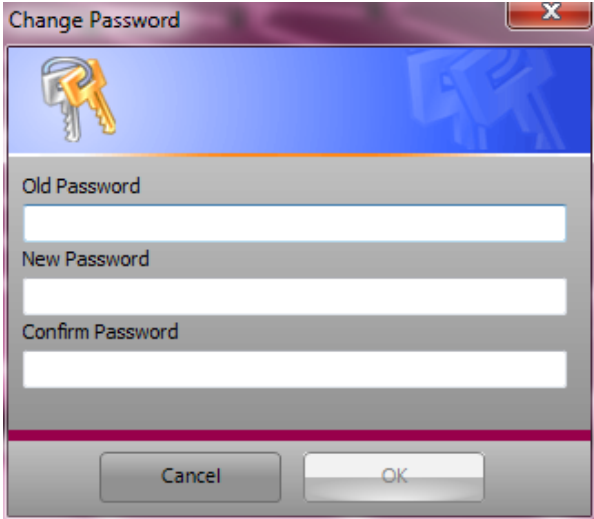
Information: To maximize security, the software includes various user rights. Please log in as Administrator to add, edit or delete additional accounts. For routine use of pre-programmed **AESKUBLOTS®**, we recommend to log in as a common user. Accounts can be created as many as necessary. The username "user" is predefined. If you want to use this account, enter "user" as the username and password.

2. Enter your username and password.
3. Confirm entry with „OK“.

3.1.1 Change password

Each created user can change the stored password on the login interface.

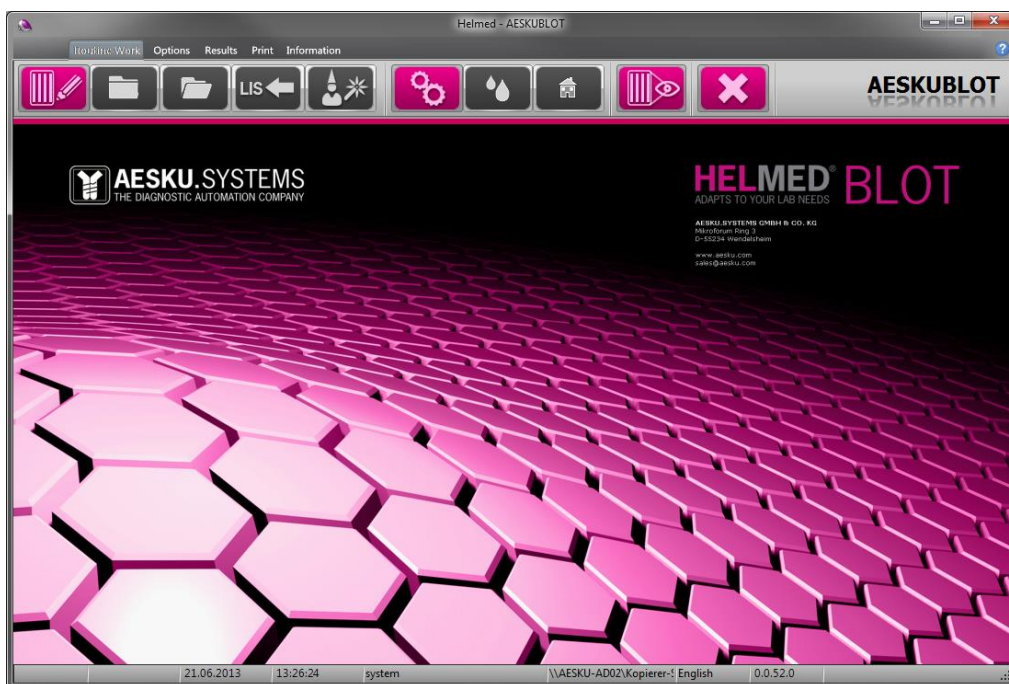
1. Click “Change Password”. A window will open.



A dialog box titled "Change Password" with a close button (X) in the top right corner. The dialog has a blue header bar with a key icon. Below the header, there are three text input fields labeled "Old Password", "New Password", and "Confirm Password". At the bottom, there are two buttons: "Cancel" and "OK".

2. Enter your old password.
3. Enter your new password and confirm it.
4. Confirm your entry with „OK“.
5. Log in with your new user data.

3.2 Main screen



After successful registration in the program, the **HELMED® BLOT** main screen is displayed.

This offers a menu control panel with different toolbars (ribbons) for each menu option. The area below the ribbon reveals the corresponding information and also offers active elements such as buttons, tabulator fields and check boxes as well as passive fields such as text and graphic boxes.

The following five menu options can be found at the top of the screen:

Routine Work

This toolbar contains options for creating a new worklist, opening a saved worklist, editing and saving the current worklist, creating a LIS connection, starting the loading wizard, connecting to the HELMED®, initiation of washing and priming programs, moving the pipetting arm to the start position, accessing the AESKU.SCAN® software and exiting the program.

- | | |
|--------------------------|--|
| a. Loading Wizard | The loading wizard helps with reagent loading and leads to the run screen. |
| b. Run screen | The run-screen controls and monitors the preparation of the Aeskublot assays. |
| c. AESKU.SCAN | The AESKU.SCAN® software enables reading of the Aeskublot strips, calculation, and documentation of the results. |

For more information refer to chapter 3.3.1.

Options

This toolbar contains options for user management. Users can be added or deleted, access rights modified and passwords altered. Parameters for **AESKUBLOTS®** tests and washing parameters can be defined and the language selected. Access to this menu is limited and requires a password.

Results

This toolbar contains options for management of the results. The test results can be visualized and sent to the LIS.

Print

The print toolbar contains options for designing and printing the report.

Information

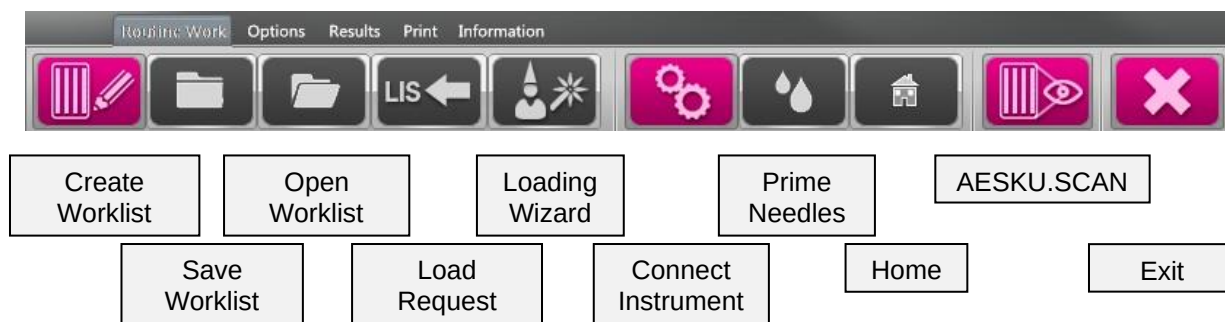
This toolbar contains options for showing the log file, a Quick Guide of the software and provision of additional information about the software.

At the bottom is a status bar providing the following data (from left to right): Date, time, user, selected printer, language and version of the software.

3.3 Menu bar

3.3.1 Routine Work

The **Routine Work** ribbon in detail:



Create Worklist: The button **Worklist** opens or updates the worklist screen and shows the current worklist. In this screen a new worklist can be created. Only one worklist can be handled at one time. This worklist has the status of the current worklist.

Save/Open Worklist: The buttons **Save** and **Open** are for saving the current worklist or for loading a saved worklist and using it as the current worklist. To save a worklist a file name composed of today's date and actual time is recommended by the software as a default file name.

Load Request: The LIS **Load** request button is for loading a worklist from a laboratory information system.

Loading Wizard: The **Loading Wizard** button initiates the loading wizard and is for loading and setting up the **HELMED**[®] with the reagents for the AESKUBLOT assay selected in the current worklist. In up to eight steps the wizard helps place all test strips, samples, reagents and buffers in sufficient volumes for processing the current worklist.

Connect Instrument: The **Connect** button enables connection of the software with an available **HELMED**[®]. Toggling between the gear wheels icon and the star icon will connect/disconnect the software from the **HELMED**[®].



disconnected or
demo mode



connected

Prime Needles: The **Prime Needles** button opens a window for selecting the liquids for priming the **HELMED**[®] pipetting needles. Available for selection are: 1. buffer #1, 2. buffer #2, 3. priming with both buffers; or 4. a predefined decontamination procedure (duration: 2 x 15 minutes). Find more information in chapter 5.1.

Home: Pressing the **Home** button moves the pipetting arm of the **HELMED**[®] to the starting position.

AESKU.SCAN: The **AESKU.SCAN**[®] button starts the **AESKU.SCAN**[®] software. This software assists in analysis, documentation and archiving of AESKUBLOT tests. Before using the **AESKU.SCAN**[®] software read the **AESKU.SCAN**[®] manual.

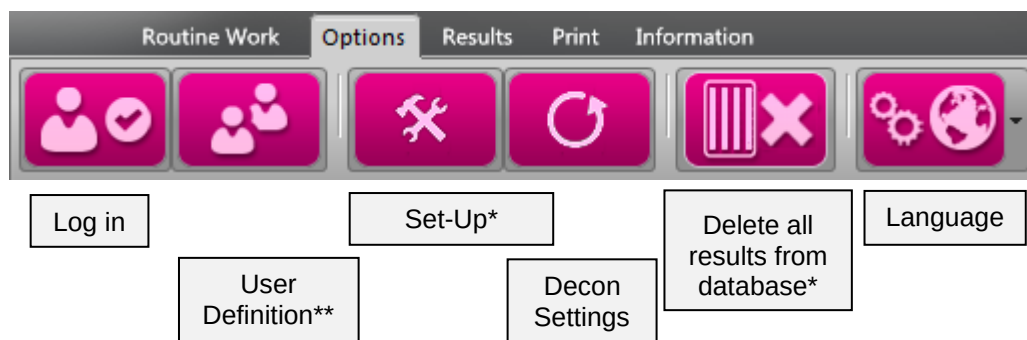
Exit: The **Exit** button quits the present **HELMED**[®] BLOT software. All settings and changes will be saved and the connected **HELMED**[®] will be disconnected.

Note: Processed worklist should be saved prior to exiting the program.

The **HELMED®** will also be disconnected if you close the program.

3.3.2 Options

The **Options** ribbon in detail:



* access for administrator

** access for administrator and manager

Log in: The **Log in** button enables log in as a different user.

User Definition: The **User Definition** button opens a screen to add, modify or to delete users of the **HELMED®** BLOT software.

An entry consists of the username, log in name, password, security level and the selection of an active or inactive account.

Level	Administrator	Manager	User
Full access	✓	✗	✗
Full access to:			
Options/Assay Definition	✓	✗	✗
User management			
<i>add new, edit or delete Administrator account</i>	✓	✗	✗
<i>add new, edit or delete Manager account</i>	✓	✓	✗
<i>add new, edit or delete User account</i>	✓	✓	✗
Change decontamination settings	✓	✗	✗
Change report design	✓	✗	✗
Delete results from the database	✓	✗	✗

Set-Up: The **Set-Up** button opens a screen allowing access to most of the **HELMED®** BLOT software parameters (stored in different tables of a database). To access this menu, an Administrator account is necessary. The parameters are grouped into 4 categories. Details and notes for optimal Set-Up are described in the technical manual.

Assay Parts: Mapping the database tables.

- Liquid Enumeration
- Liquid Handling
- Reagent Enumeration
- Global Z setting
- Shaking parameters
- Trough data

Assay Definition: Detailed settings for each individual AESKUBLOTS® assay.

- Assay
- Global
- Pre-incubation
- Samples
- Conjugate
- Substrate
- Stop
- Wash

AESKU.SCAN Definition: parameters for AESKU.SCAN®

- AESKU.SCAN

LIS Interface: Settings for communication with the laboratory information system.

- Translation table
- Settings

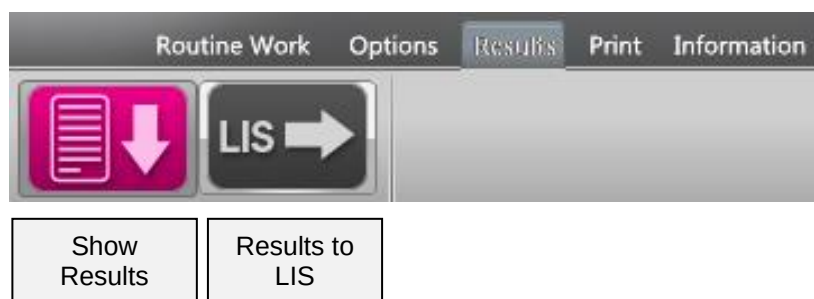
Decon Settings: The **Decon Settings** button allows scheduling of regular decontamination runs. Aesku.Systems GmbH & Co.KG recommends a weekly decontamination of the device. The default value is set to decontamination every 6 days, once a week.

Delete: The **Delete** button allows deleting all results from the database.

Language: The **Language** button enables selection of the program language.

3.3.3 Results

The **Results** ribbon in detail:



Show Results: The **Show Results** button opens the result screen with the option to filter the selection of individual results within a given time frame. The default setting is the current date.



As default, the actual date is pre-selected. To change this, click the **Date** fields to enter the time frame required. The dropdown check list on the right provides all result files within the given time frame. The results can also be selected by the patient ID.

Click “Refresh” after you have selected a time range and patient ID. With “Sample Data” you can retrieve and modify the data of the selected patients.

Results to LIS: The **Results to LIS** button initiates transfer of the selected results to the laboratory information system.

3.3.4 Print

The **Print** ribbon in detail:



* access for administrator

Design Report: The **Design Report** button opens the program FastReport for designing own report templates if necessary. All report types are predefined.

Print: The **Print** button has a dropdown checklist for selecting the object for printing. Depending which menu is active, a worklist, an assay or a report template can be selected for printing.

3.3.5 Information

The **Information** ribbon in detail:



The **Log File** button opens a file select box to select a log file. A log file will be created for each day the **HELMED®** BLOT software is initiated.

The **Help** button opens a quick guide in a separate window.

The **Information** button opens a separate window detailing software version information and manufacturer.

4 How to start a run

4.1 Preparing the device

Before starting a run, you should consider the following:

1. Make sure that the BLOT Upgrade Kit is installed and the correct racks are on the outer turntable. (section 2.1.3).
2. Make sure that the device is connected to the PC.
3. Ensure the system bottles at the terminals on the back of the device are properly closed. (section 2.1.4)
4. Turn on the device and the PC.
5. Start the program by double clicking on the desktop shortcut. (section 3.1)
6. Connect the device via the "connect instrument" in the ribbon routine work. (section 3.3.1)
7. Rinse the instrument.

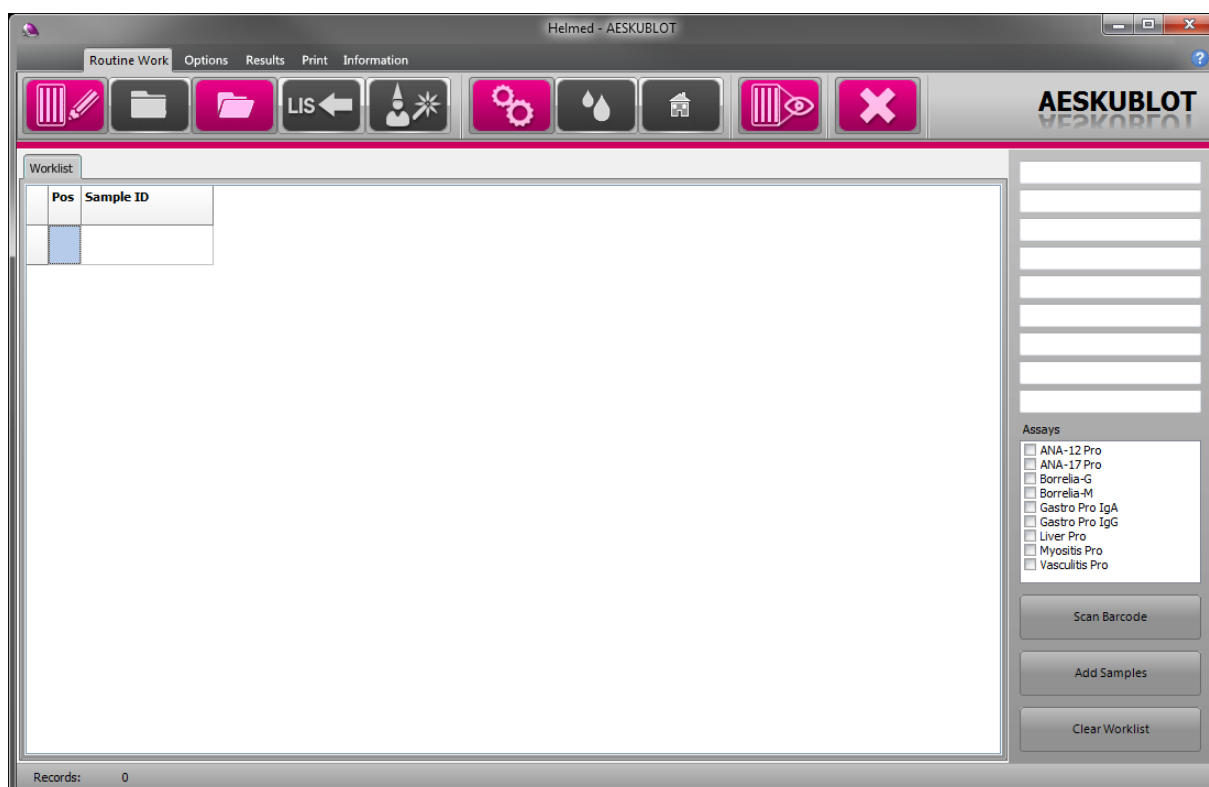
4.2 Create a worklist

When the device is ready, worklist can be created.

1. Click "Create Worklist" button below the ribbon routine work.



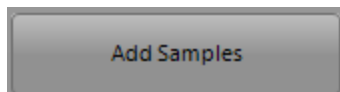
The interface to create a worklist opens.



2. Define the number of patients and the ID manual (a) or automatically by reading with the integrated barcode scanner (b).

a. Enter a sample manually

Click „Add Samples“.

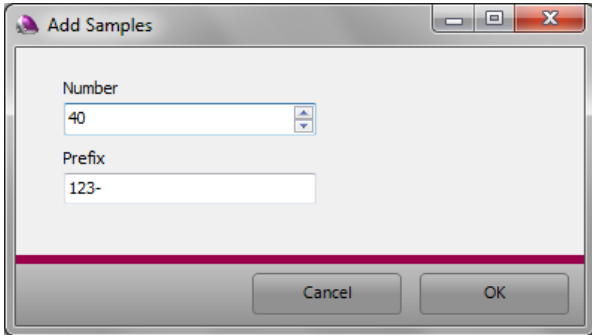


In the first field, enter the number of samples.

Type a prefix in the second box if necessary.

The prefix is placed before the sample number.

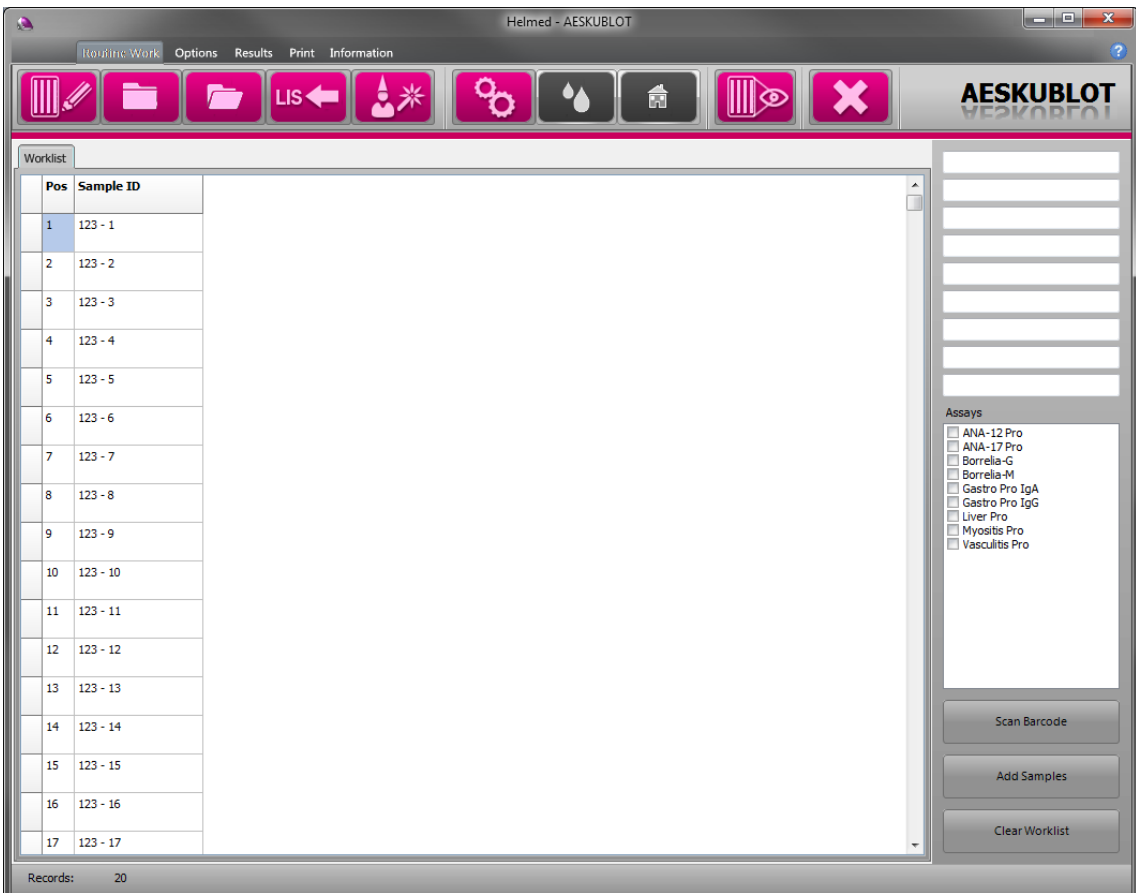
Click "OK" to confirm.



The dialog box titled "Add Samples" contains two input fields. The first field, labeled "Number", has the value "40" entered. The second field, labeled "Prefix", has the value "123-" entered. At the bottom of the dialog are "Cancel" and "OK" buttons.

Note: If no prefix is selected, the sample numbers from 1 to the maximum number of samples are numbered consecutively.

The worklist is presented with two columns. The first column corresponds to the position of the sample on the sample rack, the second column is the sample number or sample name.



The main interface of the AESKUBLOT software shows a menu bar (Routine Work, Options, Results, Print, Information) and a toolbar with various icons. The central area displays a "Worklist" table with two columns: "Pos" and "Sample ID". The table contains 17 rows of data, with the first row highlighted. To the right of the table is a list of "Assays" with checkboxes for ANA-12 Pro, ANA-17 Pro, Borrelia-G, Borrelia-M, Gastro Pro IgA, Gastro Pro IgG, Liver Pro, Myositis Pro, and Vasculitis Pro. Below the assays list are buttons for "Scan Barcode", "Add Samples", and "Clear Worklist". The status bar at the bottom indicates "Records: 20".

Pos	Sample ID
1	123 - 1
2	123 - 2
3	123 - 3
4	123 - 4
5	123 - 5
6	123 - 6
7	123 - 7
8	123 - 8
9	123 - 9
10	123 - 10
11	123 - 11
12	123 - 12
13	123 - 13
14	123 - 14
15	123 - 15
16	123 - 16
17	123 - 17

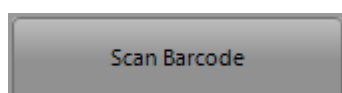
Note: You can put the sample tubes into the sample rack before or after creating the worklist.

b. Scan sample barcode

Put the tubes with barcode affixed into the sample rack. Turn the tube containing the barcode to the outside, so that the scanner can read the bar codes properly. Note the numbering on the rack. This is the order in which the samples are displayed in the worklist.

Note: If the barcode scanner detects an empty position, the scanning of the rack will be terminated. Tubes without bar codes or tubes with unreadable bar codes are marked with a question mark and a serial number.

Click on the button "Scan Barcode" to scan the sample ID using the barcode scanner.

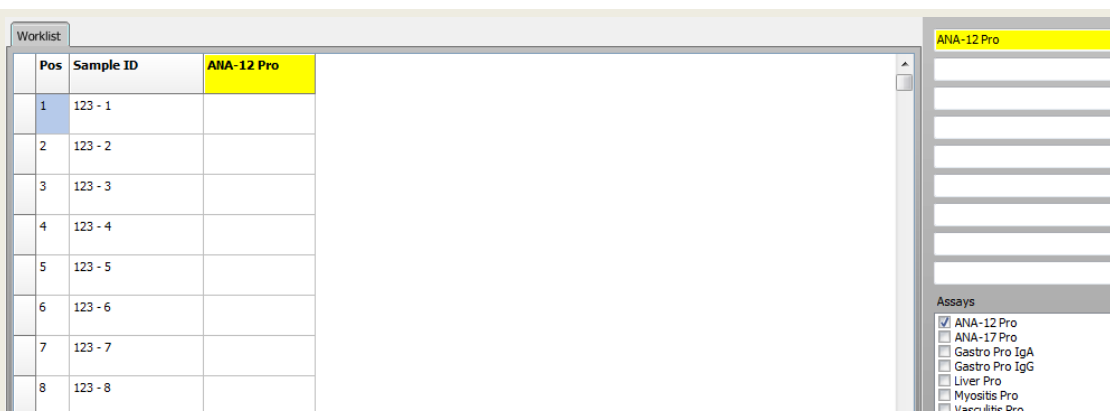
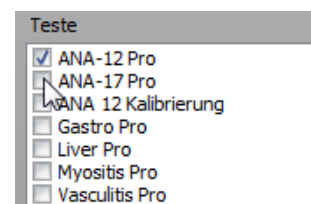


The scanned sample IDs starting with the first tube are sequentially read and displayed to the user as a list. To rename a sample number, the cursor should be moved to the field with the name to be changed and the new sample name entered by using the keyboard. A single sample can be removed from the worklist by selecting the field with the sample name and deleting via the context menu (right mouse button). After confirming deletion, the sample is removed from the worklist. Remote samples or items are excluded from this. All other samples / positions are not affected.

3. Select the tests to run.

a. Manual selection of tests

Select the tests from the right side of the interface. To add a test to the work list, put a check mark in the box next to the desired **AESKUBLOTS®** test. The selected **AESKUBLOTS®** test is identified above the selection list and adjacent to the displayed color sample list (see figure below).



Note: Up to nine different **AESKUBLOTS®** tests are provided per passage. Autoimmune and Borrelia **AESKUBLOTS®** cannot be processed in parallel.

b. Request assignment of samples and tests from LIS

After the sample ID is read with the integrated barcode scanner the tests for the samples can be obtained by clicking "LIS requirement". The worklist is complete when automatic mapping is finished.

4. Assignment of the samples to the **AESKUBLOTS®** tests

Note: If you have requested the sample test assignment from LIS, please go to step 5.

The next step is the assignment of samples to the selected **AESKUBLOTS®** tests. There are several ways of achieving this.

Worklist		
Pos	Sample ID	ANA-12 Pro
1	123 - 1	
2	123 - 2	
3	123 - 3	
4	123 - 4	

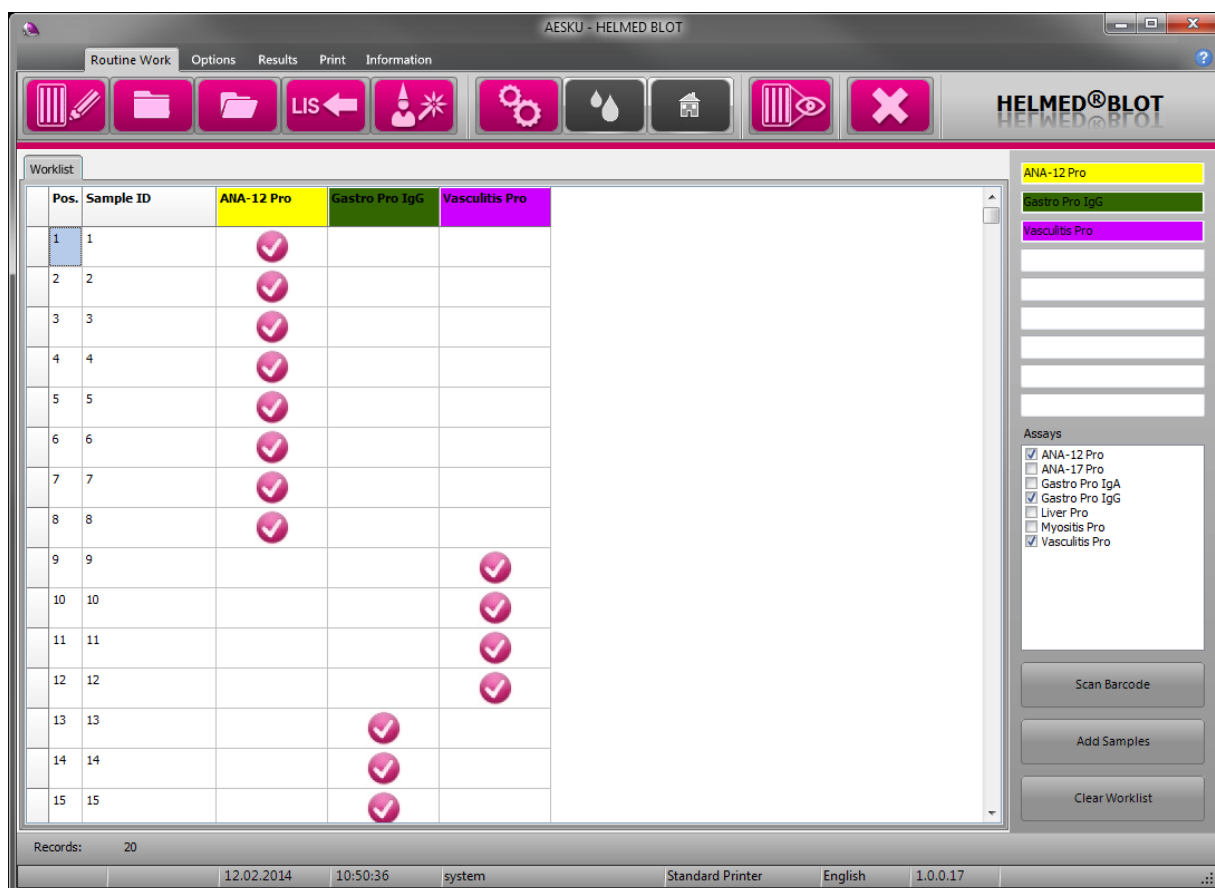
A click on the colored top box named **AESKUBLOTS®** test assigns all samples for this test.

Deletion is possible by double clicking on the purple check mark.

A multiple selection can be made by the marking of fields with the mouse. Using the context menu, as selected fields can be selected, deselected, or the sequence inverted.

Worklist		
Pos	Sample ID	ANA-12 Pro
1	123 - 1	
2	123 - 2	
3	123 - 3	
4	123 - 4	
5	123 - 5	
6	123 - 6	
7	123 - 7	
8	123 - 8	
9	123 - 9	
10	123 - 10	
11	123 - 11	

Worklist		
Pos	Sample ID	ANA-12 Pro
1	123 - 1	
2	123 - 2	
3	123 - 3	
4	123 - 4	
5	123 - 5	
6	123 - 6	
7	123 - 7	
8	123 - 8	
9	123 - 9	
10	123 - 10	
11	123 - 11	



Note: The maximum number of blot strips is limited to 40. If the number of worklist assignments created exceeds the number that can be processed in one pass, surplus allocations will be deleted.

After creating the worklist the device can be loaded using the loading wizard and processing can begin. Saving the worklist is not necessary but is recommended. For this purpose, use the "Save Worklist" button. The worklist remains active until the program is terminated or until the worklist has been completely processed.

5. Click on the "loading wizard" to start the run. The procedure is described in the next chapter.

4.3 Loading Wizard

In up to eight steps, the loading wizard guides you through the set-up of the **HELMED®** for **AESKUBLOTS®** processing. For moving through the steps press the **Next>** or **<Previous** button.



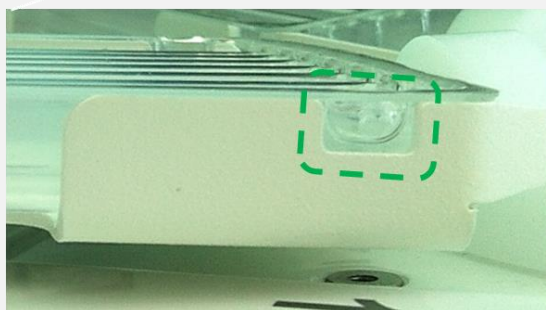
Steps 1-5:

Show the layout of **AESKUBLOTS®** in the incubation trays 1-5. There are 8 positions for **AESKUBLOTS®** strips in each incubation tray.

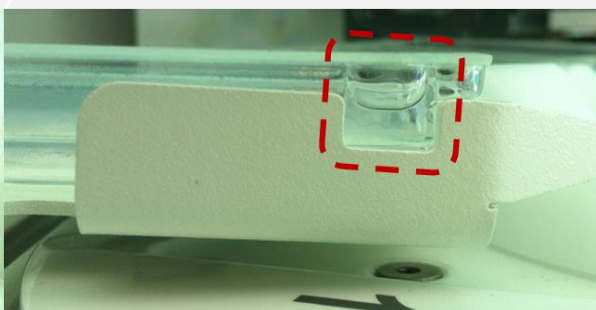
Note:



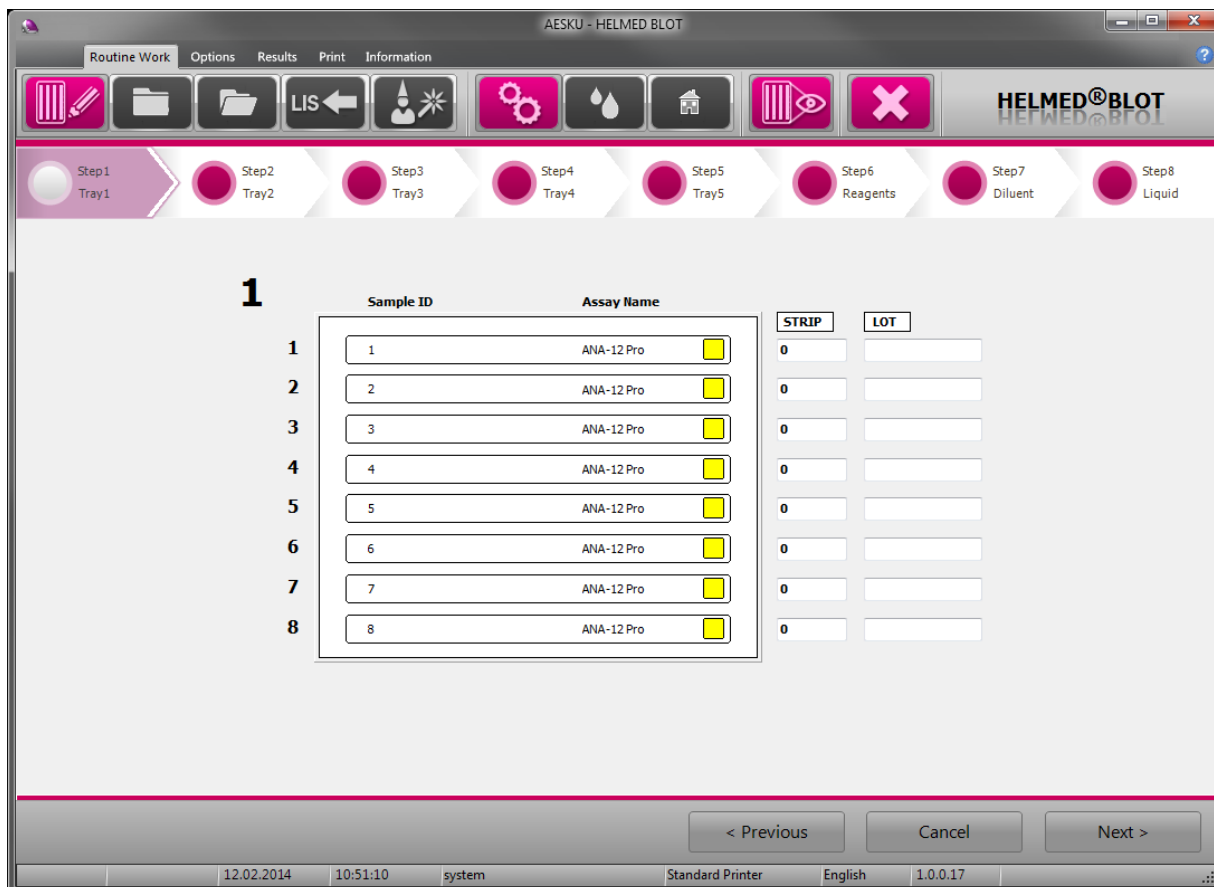
Place the incubation trays in the provided direction. Incubation trays in the wrong position may damage the needles.



right

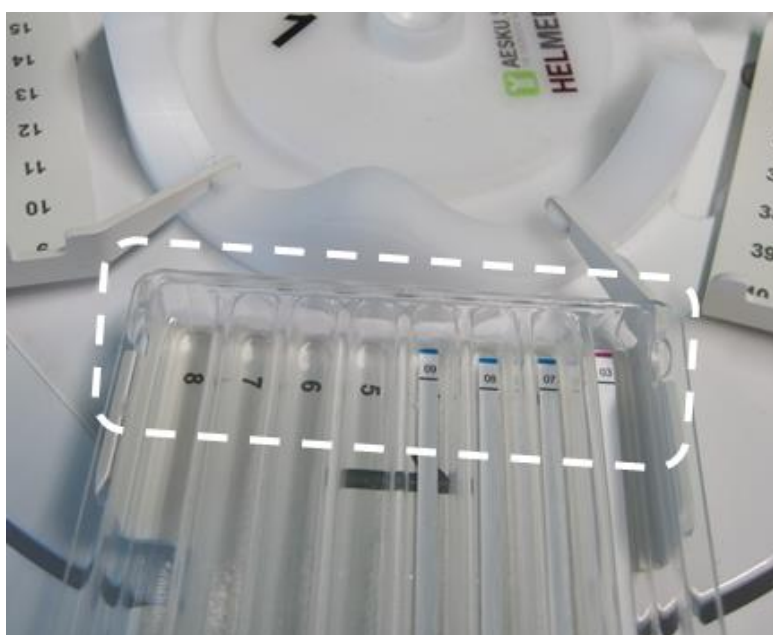


wrong



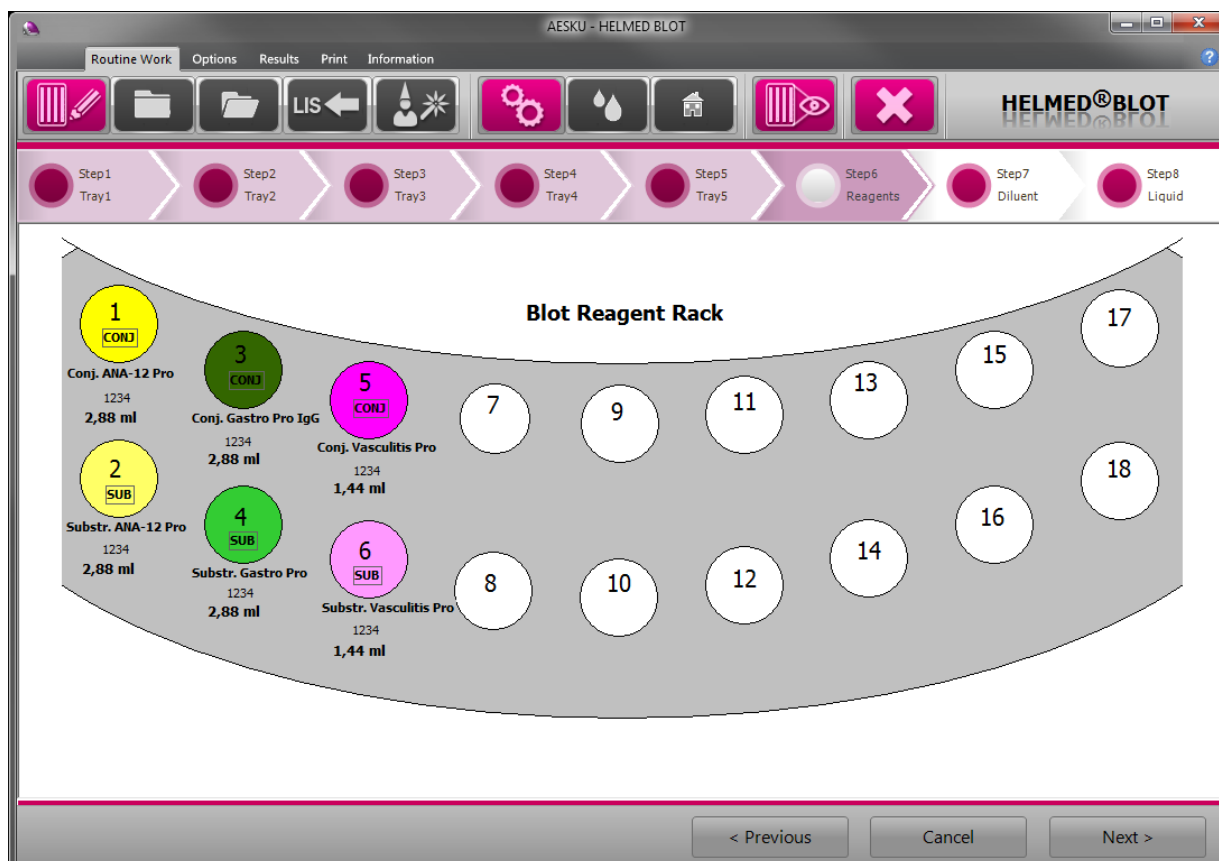
	Sample ID	Assay Name		STRIP	LOT
1	1	ANA-12 Pro	☐	0	
2	2	ANA-12 Pro	☐	0	
3	3	ANA-12 Pro	☐	0	
4	4	ANA-12 Pro	☐	0	
5	5	ANA-12 Pro	☐	0	
6	6	ANA-12 Pro	☐	0	
7	7	ANA-12 Pro	☐	0	
8	8	ANA-12 Pro	☐	0	

1. Enter the strip and batch numbers to the right of the pictured strips. The strip number is automatically labelled through to number 24 and the lot number is added. Position the strip so that the number is located on the inside of the tray or on the existing numbering on the tray holders, as can be seen in the picture.



Step 6:

Shows location of the conjugates and substrates for the different tests or lots and the minimum volumes needed for correct preparation of the AESKUBLOT assays. Eighteen positions (1 to 18) are available for 20 ml vials in the middle ring of the **HELMED®**. The software automatically allocates the reagents to their positions.

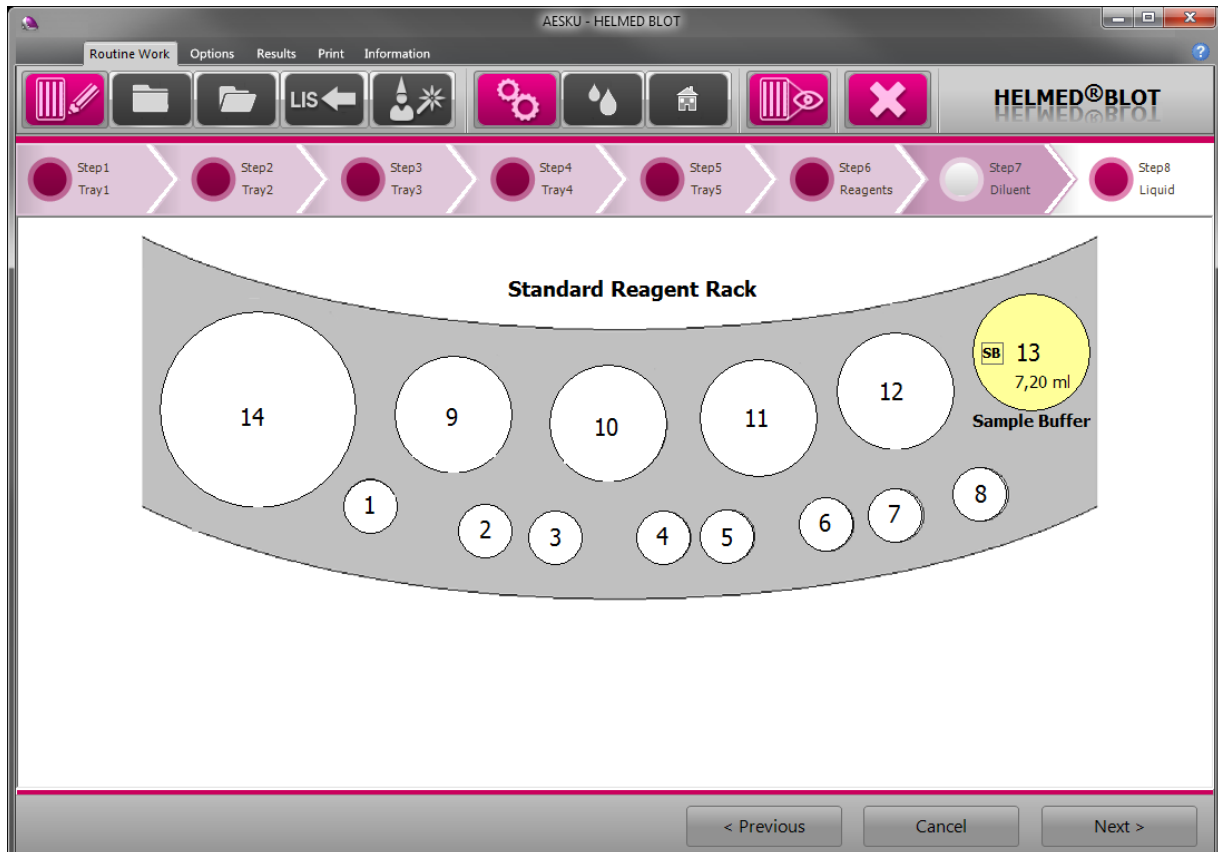


2. Place the displayed reagents on the intended position in the blot reagents rack. Ensure that the required volume is available.

Step 7:

Shows location of sample buffer and the minimum volumes needed for correct preparation of the **AESKUBLOTS®** assays. The software automatically allocates the reagents to their positions.

Note: For **AESKUBLOTS®** Borrelia G / M the sample buffer is not required.



3. Place the sample buffer on the indented position in the standard reagents rack (RCKR8). Make sure that there is no foam on surface of the sample buffer. Presence of foam leads to detection of wrong amount of reagents!

Step 8:

Check if:

- all samples are placed on the **HELMED®** sample rack;
- all strips are placed in the incubation trays;
- all conjugates and substrates are placed correctly;
- the bottles #1 (distilled water) and #2 (wash buffer) are filled;
- and the waste bottle is empty.



4. Check that the system bottles are correctly connected on the back of the device.

5. Check again all reagents and samples which are necessary for the run.

Note: There is no volume check of bottles connected to “Wash#1” and “Wash#2” connectors. Ensure that the bottles are sufficiently filled and that the flexible tubing reaches the bottom of the bottle.

To exit the loading wizard and enter the run-screen click the **Next>** button.

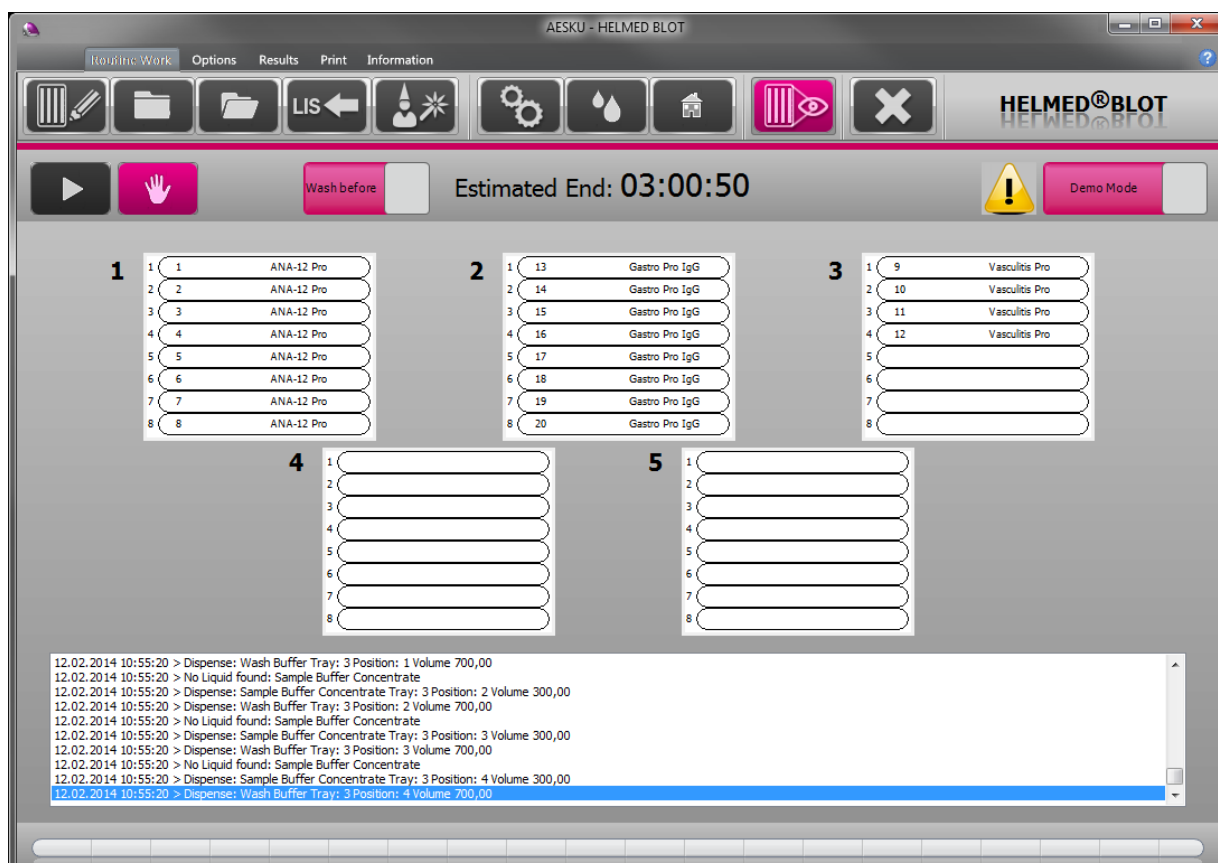
Note: To initiate a run the device has to be connected.

4.4 Run screen

After the loading wizard the run screen is displayed.

6. Please ensure that all samples, reagents and buffers are positioned correctly and that the lid of the HELMED® is closed.

7. Press the “Start” button to  start the current workload.



Immediately after starting, all conjugates, substrates and sample buffer are checked for their correct positions. Errors are indicated by a warning symbol indicating that the log file must be checked for errors. If this is the case, then you must restart the processing operation.

The **Terminate Run** button  terminates (after a confirmation prompt) processing of the current workload.



Once terminated, the run cannot be resumed.

The **Wash Before** button toggles between **Wash** and **No Wash**. If **Wash** is selected, the HELMED® flushes all tubes and needles with wash buffer (connector #2). Aesku.Diagnostics GmbH & Co.KG recommends use of this option.

The field **Estimated End** shows the calculated time for completion of the processing. The estimated time is shown in the middle of the run screen.

The **Simulation** button toggles between **Demo Mode** and **No Demo Mode**. This is for running the software in demo mode without a connected **HELMED®**.

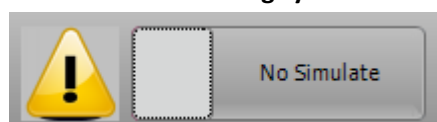
Incubation tray layout: In the middle of the screen the states of the five incubation trays are shown. During operation the individual incubation trays are differently colored, indicative of the processing step.

Log file: A text field shows the logging of all assay preparation steps. If an error occurs an error message will be reported in the log. Additionally, a **yellow warning symbol (on the left side of the “simulation” button)** will signal that an error has occurred. A separate log file is created each day.

Possible Errors:

Description	Errorcode
OK	0/1
NoBuffer	90
NoSample	900
NoConjugat	9000
NoSubstrat	90000
General error	900000

Yellow warning symbol



Example - **HELMED®** BLOT Error Report (will open after every run):

AESKUBLOT

20.06.2013 10:20:11

Incubation Tray 1

Trough	Sample ID	Test Name	Charge	Errorcode
1	123 - 1	ANA-12 Pro	1	99990

HELMED[®]

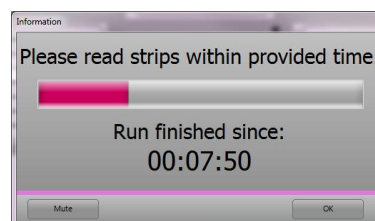
BLOT

ADAPTS TO YOUR LAB NEEDS

Progress bar: A progress bar at the bottom of the run screen displays the progress of the run.

Upon completion of Aeskublot processing, a window notifies that the processing completion. This is followed by an acoustic message.

Quit the window, open the cover of the **HELMED®**, remove the incubation trays from the holder ring (**pay attention to numbering**) and place the strips on the template prepared with the **AESKU.SCAN®** software. **Follow the instructions in the AESKU.SCAN® manual for this.**



Please check correct assignment of the test strips!

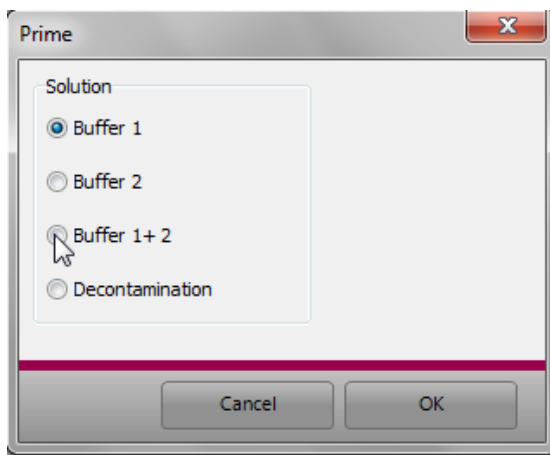
5 Maintenance

5.1 Daily shutdown

After processing a work list the instrument should be primed with distilled water. For this purpose, replace wash solution ("Wash#2" connector) with distilled water.

This keeps the fluid lines in good condition and avoids particles clogging the needles and tubing.

1. Wipe the outside of the needles first with a tissue containing 70% ethanol, then with distilled water.
2. Empty the wash bottle (#2) and rinse the bottle with distilled water. Fill bottle #1 and #2 with 100 ml distilled water.
3. Connect the device.
4. Click "Prime Needles" and choose the washing option "Buffer 1+2".



5. Empty the liquid waste bottle after flushing.

5.2 Weekly maintenance

Prime the instrument once a week with 0.3 % sodium hypochlorite (NaOCl) solution or alternatively 70% ethanol. Choose the washing option "Decontamination" and follow the steps on the display.

Note: After cleaning the instrument with sodium hypochlorite (NaOCl) solution, it is essential to prime the instrument with distilled water. The decontamination solution must not contain any surfactants as these are very persistent and can affect the needle level detection behaviour.

Commercially available chlorine cleaners contain surfactants!

6 Regulatory Symbols



In-vitro Diagnostic (IVD) use



European Conformity



Observe the instructions for use



CAUTION!



Manufacturer



Date of Manufacture



Reference Number



Serial Number



Unique Device Identification



Laboratory Equipment

Electrical Safety UL 61010-1



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