HettInfo II

EN **Operating instructions**

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1   How to use these operating instructions

- Before using the device, the operating instructions are to be read and observed.
- The operating instructions are a part of the device. They must always be kept readily available.
- If the device is set up at a different location, the operating instructions must be provided with it.

2   Symbol meanings

Symbol in this document:
Attention: General danger point.
This symbol indicates safety-relevant information and points out potentially dangerous situations.
Non-observance of these warnings can lead to material damage and personal injury.

Symbol on the device and in this document:
Laser radiation warning.

Symbol on the device:
Connection for the barcode scanner.

Symbol in this document:
This symbol points out important circumstances.

Symbol on the machine:
Symbol for the separate collection of electric and electronic devices according to the guideline 2012/19/EU.
Applies in the countries of the European Union, as well as in Norway and Switzerland.

Symbol on the packaging:
This side up.

Symbol on the packaging:
The transport packaging must be stored, transported and handled within the indicated humidity range (10% - 80%).

Symbol on the packaging:
The shipment packaging must be stored, transported and handled within the indicated temperature range (-20°C - +60°C).

Symbol on the packaging:
The transport packaging must be kept away from rain and kept in a dry environment.

Symbol on the packaging:
Fragile, handle with care.

Symbol, HettInfo II:
Waiting for actions

Symbol, HettInfo II:
Successful scan operation

Symbol, HettInfo II:
Cancel

Symbol, HettInfo II:
Volume muted

🔔	Symbol, HettInfo II: Volume
📅	Symbol, HettInfo II: Date
⚙️	Symbol, HettInfo II: Setup menu
⚠️	Symbol, HettInfo II: Error
☀️	Symbol, HettInfo II: Brightness
📖	Symbol, HettInfo II: History (logbook)
☰	Symbol, HettInfo II: Detail view
‹	Symbol, HettInfo II: To the left…
›	Symbol, HettInfo II: To the right…
✓	Symbol, HettInfo II: OK/Accept
⌫	Symbol, HettInfo II: "Back" key
🕐	Symbol, HettInfo II: Clock
↪	Symbol, HettInfo II: Go back
⬤▭	Symbol, HettInfo II: Switch is switched off
▭⬤	Symbol, HettInfo II: Switch is switched on
🔌	Symbol, HettInfo II: Safely remove USB stick (unmount)
🔄	Symbol, HettInfo II: Detect USB stick (mount)
🖥️	Symbol, HettInfo II: Export of data
📋	Symbol, HettInfo II: Import of data

3   Intended use

The program presented here is for documenting the process data of centrifuge runs, and is therefore only intended for this purpose.

Another use or one which goes beyond this, is considered to be non-intended. The company Andreas Hettich GmbH & Co. KG is not liable for damage resulting from this.

Observing all information in the operating instructions and complying with the measures described therein are also a part of the intended use.

4   Safety information

> ☞ **If any of the instructions in these operating instructions is not followed, no warranty claim applies to the manufacturer.**

- **Before commissioning the data documentation system HettInfo II, the operating instructions are to be read and observed. Only persons who have read and understood the operating instructions may use the data documentation system HettInfo II.**

- In addition to the operating instructions and the binding regulations for accident prevention, the recognized professional rules for safe and proper work are to be observed. The operating instructions are to be supplemented with instructions based on the national regulations for accident prevention and environmental protection of the country where the device is used.

- The HettInfo II is built according to the state of the art and is reliable. It could pose a danger to the operator or third parties, however, if it is not used by trained personnel or if it is used improperly or not as intended.

- It is not allowed to operate the HettInfo II with strongly corrosive substances which could impair the mechanical strength of the accessory parts.

- Repairs may only be performed by a person authorized by the manufacturer.

- Only original spare parts and approved original accessories of the company Andreas Hettich GmbH & Co. KG may be used.

- The following safety regulations apply:
  EN / IEC 61010-1 and EN / IEC 61010-2-020 as well as their national deviations.

- The safety and reliability of the barcode unit are only guaranteed if:
  - The HettInfo II is operated according to the operating instructions.
  - the electrical installation at the set-up site of the barcode unit meets the requirements of the EN / IEC regulations.

- Meeting the country-specific requirements concerning occupational safety with regard to the use of laboratory centrifuges at the workplaces provided for this purpose by the operating company is the responsibility of the operating company.

- HettInfo II only supports the SMB logbook, to version 3.1.1, for network communication.

- The HettInfo II system stores the process data for max. 3000 centrifugation runs. Starting from the 3001st centrifugation run, the respectively oldest acquired process data set of a centrifugation run is deleted when the process data of a new centrifugation run is added. This way, the max. number of 3000 process data sets is ensured.
  The data should be transferred to a server at least once per week.

5   Scope of delivery

The following accessories are delivered with the barcode unit.

1   manual barcode scanner
1   holding bracket for the manual barcode scanner
1   set of operating instructions for the HettInfo II

6   Commissioning the barcode unit

Stick the USB plug of the barcode scanner into the USB port provided for it on the centrifuge.

☞	**NOTE!**
	Only one USB stick may be plugged in.
	Only one barcode scanner may be plugged in at a time.

7   Barcode scanner operation

⚠	Do not look into the laser beam. Laser class 2.
	Do not direct the laser beam toward people.

7.1   Depositing the barcode scanner

⚠	**WARNING!**
	Risk of injury due to loosely deposited objects on the centrifuge!
	Loosely deposited objects on the centrifuge might move and be hurled through the surrounding area due to strong centrifuge vibrations.
	- Do not deposit objects on the centrifuge.
	- The barcode scanner must be placed in the barcode scanner holder when it is not being used.

1.   Open the lid of the centrifuge.
2.   Put the head of the barcode scanner [1] between the two holder ledges (top [2] and bottom [3]).

> ☞   Make sure that the barcode scanner handle is as far as possible in the recess of the lower ledge of the holder [3].

3.   Close the lid.

7.2   Installation of the barcode scanner (ROTO SILENTA 630 RS)

1.   Stick the USB plug into the USB socket provided for it [1].
2.   Fasten the cable to the centrifuge with the clamps [2] included in delivery.

> ☞   Make sure that there is no tripping hazard.

7.3   Installation of the barcode scanner (ROTIXA 500 RS)

1. Stick the USB plug into the USB socket provided for it [1].
2. Fasten the cable to the centrifuge with the clamps [2] included in delivery.

> ☞ Make sure that there is no tripping hazard.

7.4   Testing the barcode scanner

- Direct the barcode scanner toward a straight surface and actuate the trigger.
- A red laser beam will be visible on the surface.

7.5 Scanning the barcode

☞ Do not hold the barcode scanner directly at the barcode (maintain a distance of approx. 10 to 20 cm). The size of the laser beam changes with the distance of the barcode scanner from the barcode. Hold the barcode scanner at a slight angle to the barcode.
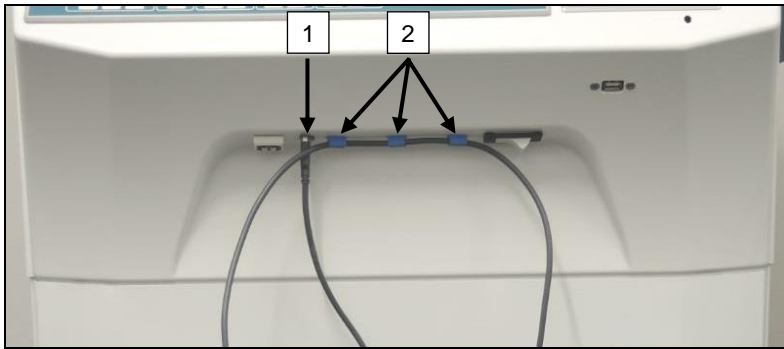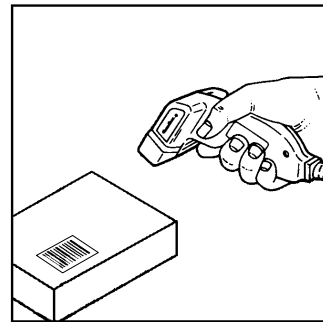
- Point the barcode scanner toward the barcode to be scanned and actuate the trigger.
- Point the laser beam horizontally toward the centre of the barcode. The laser beam must extend across the entire barcode.
- Once the barcode scanner has read the barcode, a short acoustic signal will sound and the laser beam will go out automatically.

CORRECT

INCORRECT

7.6 Scanning at the centrifuge

The scanning procedure must always begin by scanning the "start code". This should be affixed to the inside of the centrifuge lid.

After scanning the "start code", the scanning sequence of the following process data can vary:

- User barcode* (operator ID) must be scanned if such a code is stored in the database.
- Blood bag barcode (located on the blood bag). At least 1 barcode must be scanned.
- Program number can be scanned.
- "End code" can be scanned. The scanning procedure ends either by scanning the "end code" or the program number*.

(*) Depending on the setting by the user

☞ Finally, after loading the centrifuge with the blood bags, the end code must be scanned. It is also located on the inside of the centrifuge cover. After scanning the end code, the second acoustical signal beeps, which confirms the data exchange.

After scanning the end code, "Data complete -> Close lid" will appear on the display of the HMI. Afterwards, the centrifuge cover must be closed and the centrifugation run started by pressing the START button on the centrifuge. After the centrifugation run, the process data from the centrifuge control is processed by the HettInfo II.

7.7 Procedure

1. Switch on the centrifuge.
2. Open the lid. Note: See chapter 9.5.1.1.
3. Once the centrifuge and HettInfo II are ready for operation, scanning can begin.
4. Scan the start code, scan relevant barcodes.
5. On the centrifuge:
   Load the centrifuge with the plastic inserts and blood bags and then close the lid.

   Press the START key on the centrifuge control.

7.8 Barcode scanner does not work

If the barcode scanner does not work error-free, the following sources of error must be checked:

- Check the power supply.
- Check the connection of the interface cable at the barcode scanner and at the barcode unit.
- Make sure that the correct barcode is used (see chapter 8).
- Make sure that the barcodes are not dirty or damaged.

8 Barcodes

8.1 Usable barcodes

In the delivered configuration, the barcode scanner only recognizes barcodes of type code 128 (check digits).

Barcodes may not contain any diacritics. Scanning of diacritics will result in manipulations in the scanned-in data. If a diacritic is scanned, the device will beep 4x and the red lamp will light up. The operator must then delete all scanned data -> Scan the start code and begin scanning again.

It is prohibited to create user ID barcodes which begin with the character string (HET#; HET!; HET%; HB$).

Each barcode which is used for an operator ID can be used one time.
If the user name (and, therefore, also the user ID) is deleted, this user ID must not be reused.

HettInfo I allocates the user ID -> user name.

With the operator ID, the HettInfo II only makes the allocation: barcode -> operator name.

The user name and the user ID connected to it can no longer be changed after saving. If the user name changes, the user name must be saved with a new user ID.

If it should happen that two or more employees have identical first and last names, the customer must think of a way of identifying them when inputting the operator name.

Example: BC1 -> J.Mayer_No1
               BC2 -> J.Mayer_No2

8.2 Explanation of the control codes

Start code:	This code is to be glued inside the centrifuge lid. During the scan, this barcode notifies HettInfo II that a new barcode set is beginning.
End code:	This code is to be glued inside the centrifuge lid. It notifies HettInfo II of the following: If the option: "Scan program no. = End of scan" is active, it is not necessary to scan the end code. By scanning the end code, or if the option: "Scan program no. = End of scan" is active by scanning the program no., the following checks are performed: - Was a user ID acquired? - Was at least 1 blood bag code acquired? - Was a program no. acquired (as far as the "Program no. required" option is active)?
Operator ID	It notifies the HettInfo II which user is currently working.
Program number barcode:	It notifies the HettInfo II which centrifuge program is to be used. If no centrifuge program is stored at the program location in the centrifuge control, an error message will appear.
Blood bag code:	This code is affixed to the blood bag.

9 HettInfo II operation

9.1 Switching on

The HettInfo II starts automatically after switching on the centrifuge.
As long as the operating system is booting, the following start screen is displayed.

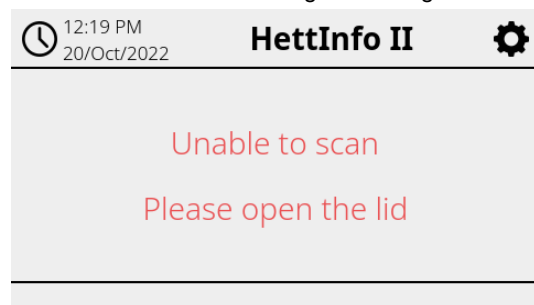### 9.2 Functions and display elements on the main screen

[1]   Date and time:
        Time base for HettInfo II. Can be changed in the setup menu [2].
[2]   Setup menu:
        Access to the setup menu. Display and change the settings. Export and import data.
[3]   Footer with status text:
        Information and instructions for carrying out the application.
[4]   Overview of the acquired scan data:
        Display of the already scanned data or information about a currently running centrifugation run.

9.3   Scan operation

9.3.1   Precondition for starting the operation
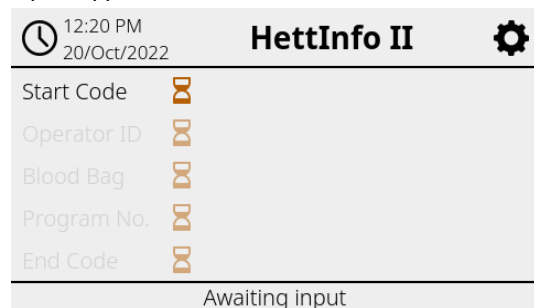
Scanning is only possible if:
1. The lid is open.
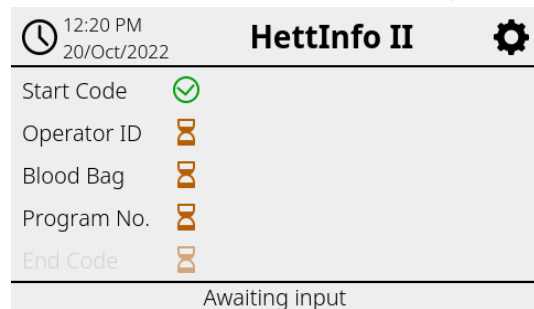2. The screen is not showing the settings.

9.3.2   Scanning the barcode sets

The scanning of a barcode set must begin by scanning the start code (for label with barcode, see enclosed accessory).

This is indicated on the screen by the hourglass displayed after the start code label. In addition, the message "Waiting for input" appears.

Once the start code has been successfully scanned, the "hourglass symbol" will change into a green checkmark.

Now the scan operation can be continued.

The process data: operator ID, blood bag and program number can be scanned in (see instructions in the footer "Waiting for input").
Here, it is not necessary to adhere to a defined order. The program number can be scanned in first, and then the operator ID, for example.

The blood bags must be detected (at least one blood bag) in order to complete the data set and be able to start the centrifugation run.
If not all data was scanned in, the centrifugation run cannot be started.

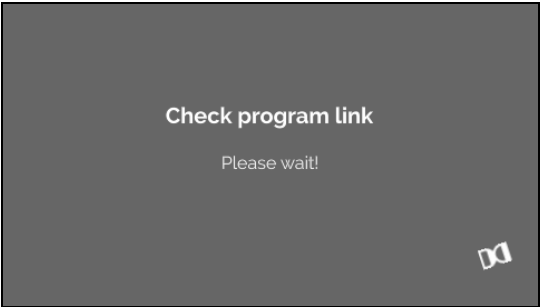|	
HettInfo II — 12:20 PM 20/Oct/2022 Start Code ✓ Operator ID ✓ Blood Bag ⧗ Program No. ⧗ End Code ⧗ Awaiting input	Operator ID was scanned and detected.
HettInfo II — 12:21 PM 20/Oct/2022 Start Code ✓ Operator ID ✓ Blood Bag ✓ 1 of max. 49 Program No. ⧗ End Code ⧗ Awaiting input	The first blood bag barcode was scanned and detected.
HettInfo II — 12:21 PM 20/Oct/2022 Start Code ✓ Operator ID ✓ Blood Bag ✓ 1 of max. 49 Program No. ⧗ End Code ⧗ Awaiting input	A maximum of 49 blood bags can be scanned.
HettInfo II — 12:21 PM 20/Oct/2022 Start Code ✓ Operator ID ✓ Blood Bag ✓ 1 of max. 49 Program No. ✓ End Code ⧗ Awaiting input	Program number was scanned and detected.
Check program link Please wait!	In the case of a program link: Waiting screen is displayed.

If something was input incorrectly, the scan operation can be reset by rescanning the start code.

Afterwards, the end code (label with barcode; see enclosed accessory) is expected by the system and can be scanned in. It is required to show the system that all data has been scanned in.

With this, all data is known to the system.
To start the centrifugation run, the lid must be closed (see instruction in the footer).

9.3.3 Detail view

Once the process data has been scanned in, such as the operator ID (see figure below), a separate list can be called up. The already scanned-in process data is clearly listed on this screen. This view can be exited again via the arrow at the upper right, which will bring you back to the main screen.
If no data has been scanned in yet, "n/a" is displayed in the respective field.

In the case of a program

In the case of a program link

If multiple blood bags were scanned in, the individual bar codes can be displayed by scrolling.
The detail view can be called up, from the initial data acquisition to the end of the centrifugation run.

9.4 Centrifugation start and sequence

The centrifugation run can be started once all required data has been scanned in.

🕐 12:22 PM 20/Oct/2022	**HettInfo II**	⚙
Start Code	⊘	
Operator ID	⊘	
Blood Bag	⊘ 1 of max. 49	☰
Program No.	⊘	
End Code	⊘	
Lid closed -> Start centrifugation		

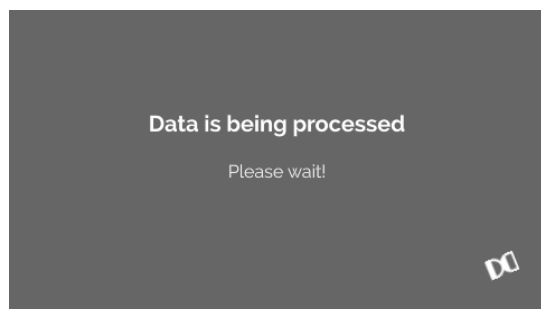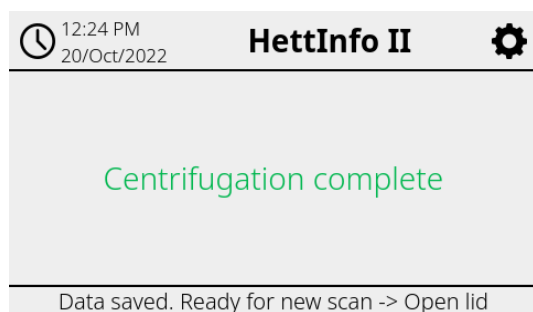The lid has been closed and the centrifugation run can be started (by pressing the START key on the centrifuge).

🕐 12:22 PM 20/Oct/2022 **HettInfo II** ⚙	
Centrifugation in progress ☰	Centrifugation run
Unable to scan	

During the centrifugation run, no additional data can be scanned in.
The process data can be displayed during the centrifugation run via the detail view.
This way, it can be retraced which blood bag is currently being centrifuged with which program and who scanned it in.

Once the centrifugation run has been completed, a message will appear on the display. Also, the data is saved in the HettInfo II.
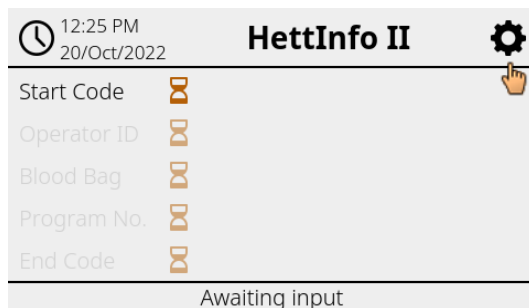
🕐 12:24 PM 20/Oct/2022 **HettInfo II** ⚙
Centrifugation complete
Data saved. Ready for new scan -> Open lid

Data is being processed

Please wait!

Once the lid has been opened, the next scanning process can be started.
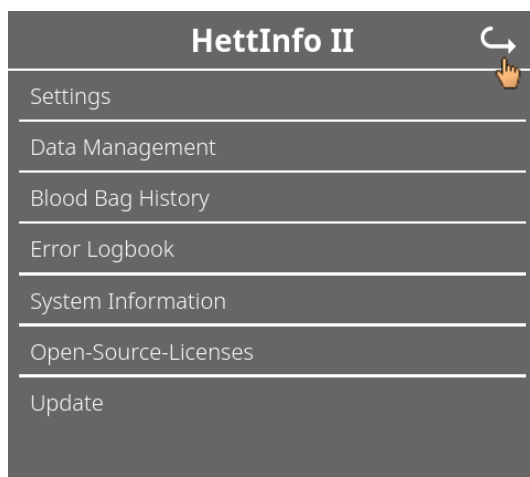
9.5 Setup menu

The setup menu is called up via the setup icon at the upper right.

To get back to the main screen, use the arrow at the upper right in the setup menu.
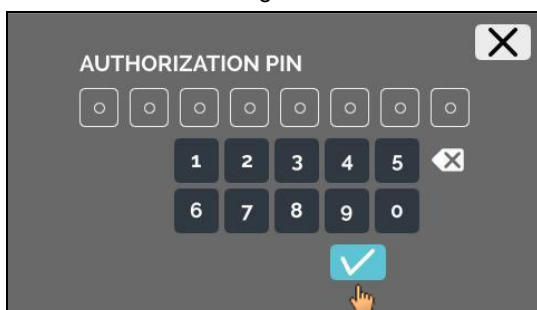
Main screen

Setup menu

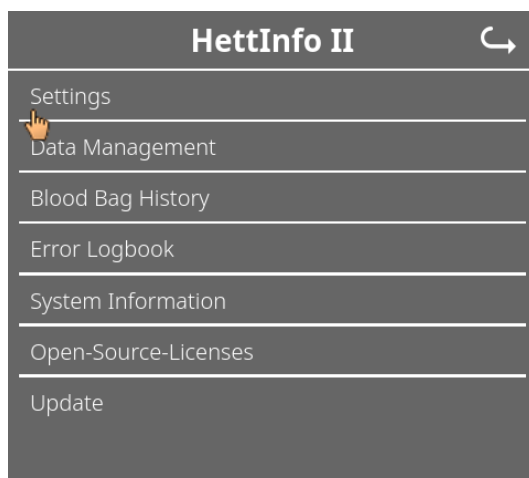An authorization PIN must be entered to get to certain areas. This is confirmed by tapping the blue checkmark.

The authorization PIN is composed of the fixed number 0955 and the last 4 digits of the serial number (SN). The serial number (SN) can be called up in the system information.
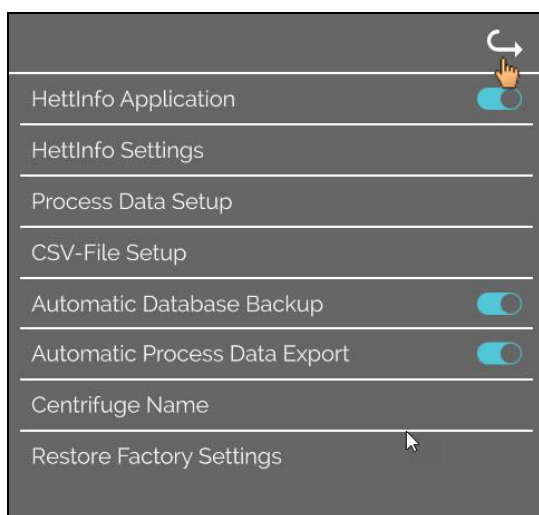
9.5.1 Settings

The menus are called up by tapping the text.

To get back to the previous menu, use the arrow at the upper right in the activated menu.

Setup menu

"Settings" menu

9.5.1.1 HettInfo application

| ☞ | It is only possible to enter and edit programs on the centrifuge control if the HettInfo II is switched off. |

| ☞ | The HettInfo II application must be switched off for working without data recording. |

You can switch the HettInfo II on and off by tapping the switch.

9.5.1.2 HettInfo settings

The settings can be displayed by scrolling the screen.

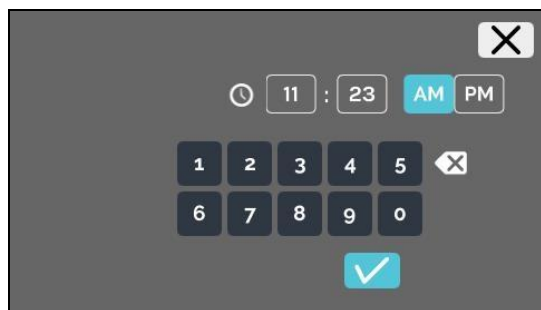- **Language setting**

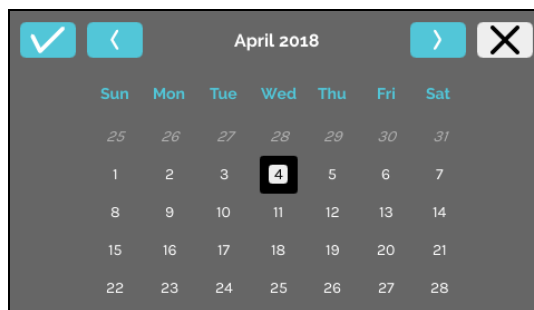You can set the language by tapping the text.

- **Date and time**

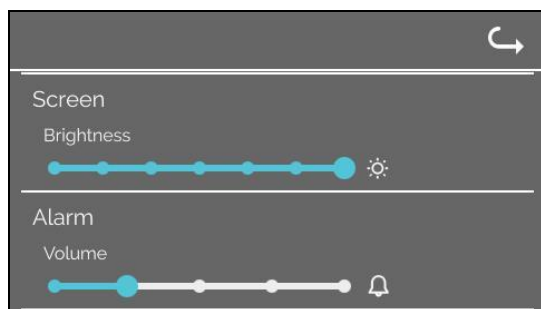You can set the date and time by tapping the text.
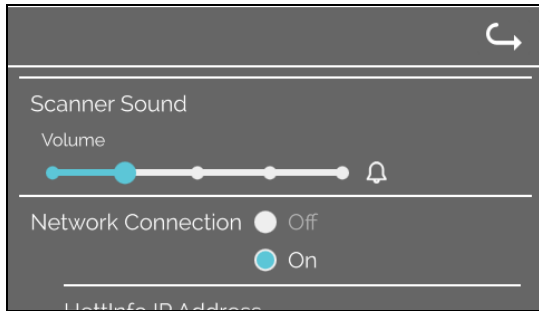

| Input of the time and time format | Input of the date via calendar function |

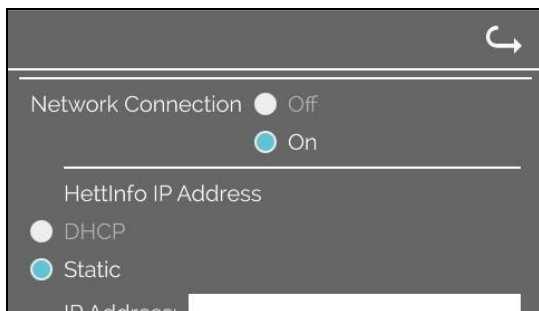- **Screen brightness and alarm volume**

The screen brightness and alarm volume can be changed with the slide control.
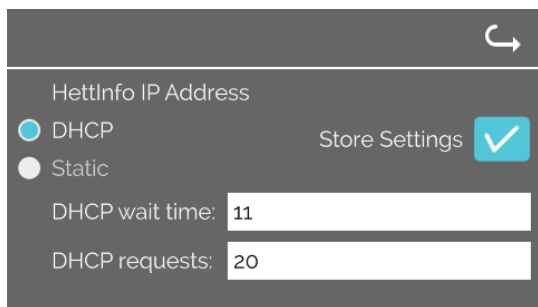
- **Scanner sound volume**

The scanner sound volume can be changed with the slide control.
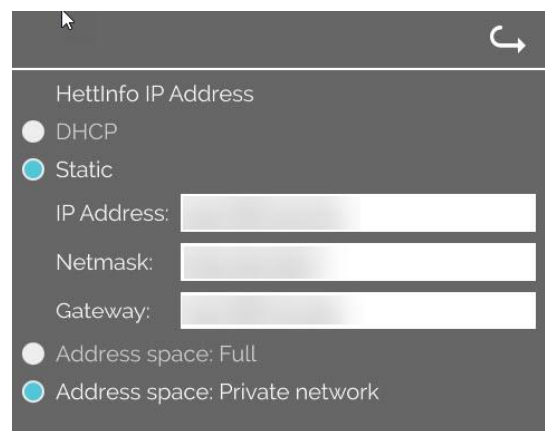
- **Network connection**

Switches the network functionality on/off.

- **HettInfo IP address**

The DHCP settings are obtained from the DHCP server.   Static - Manual setting of the network address.

☞	Information about the IP address is to be obtained from the system administrator.

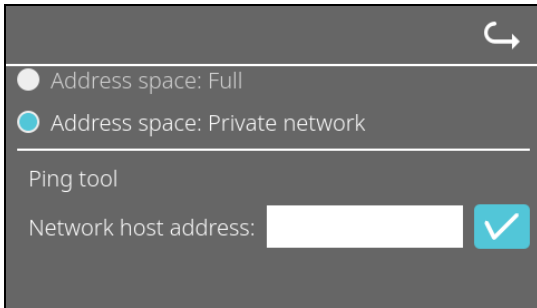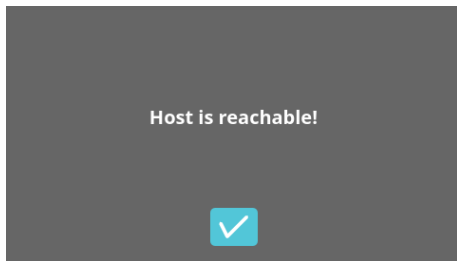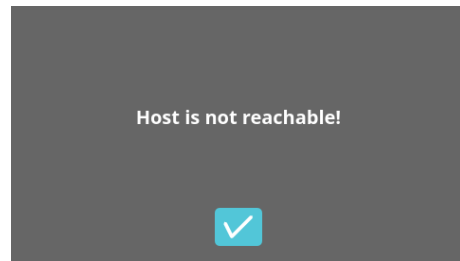| ☞	The following input limits exist for the network settings of the "automatic process data export" as well as the "automatic database backups":
	IP information IPV4 format only
	Hettich recommends using a server for storing data on a network drive (Linux or Windows).

- **Ping tool**

The ping tool is a diagnostics tool that can be used to determine if a particular host, which is connected to HettInfo II via an Ethernet connection, can be reached or not.

1. Enter the network address of the host in the field provided.
2. Confirm the address by clicking on ✓.
   ➔ The wait screen is displayed.
   ➔ The ping tool indicates whether the host could be reached or not:

Host is reachable.

Host is not reachable.

9.5.1.3 Process data settings

You can switch the barcode scanner on and off by tapping the switch.

You can define the maximum number of centrifugable blood bags by tapping and changing the number.
Min. 1 blood bag, max. 49 blood bags.

By tapping the switch, you can activate or deactivate whether a program is required or the scan is completed as soon as you scan a program.

9.5.1.4 CSV file settings

In this area, you can select which data is to be written to the CSV file by tapping the switch.

Here, you define the character with which the individual pieces of data in the CSV file is to be separated.
Allowed delimiters: "/" or ";" or "\" or "!" or "&" or "#" or "," or ":" or ".".

At this time, the daily CSV files are created within the current day.

9.5.1.5 Automatic process data export

You can activate and deactivate the automatic process data export by tapping the switch.

The export destination is set by tapping the desired memory.

Network settings can be changed here.

The export frequency is set here.
Either an export after every centrifugation run or at a certain time within the current day.

☞ Information about the IP address is to be obtained from the system administrator.

☞ The following input limits exist for the network settings of the "automatic process data export" as well as the "automatic database backups":

Storage path length	Min. 1 character, max. 255 characters
Domain name length	Min. 1 character, max. 63 characters
IP length	IPV4 format only
Length of the user name	Min. 1 character, max. 255 characters
Length of the password	Min. 1 character, max. 255 characters

Hettich recommends using a server for storing data on a network drive (Linux or Windows).

If the automatic process data export is switched on and off, the following display appears for at least 5 seconds:
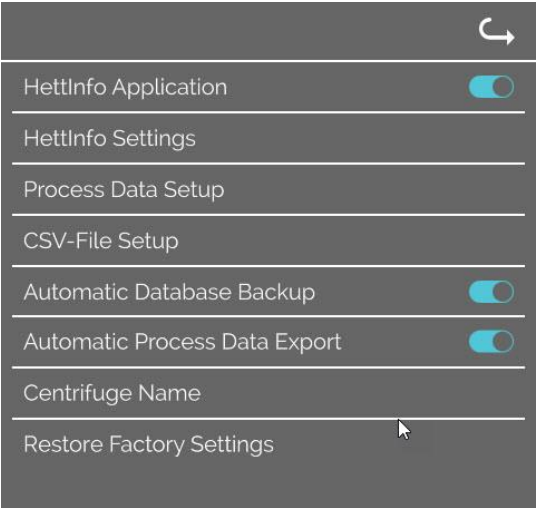
9.5.1.6 Centrifuge name

Centrifuge Name

0955_0002211

The name of the centrifuge can be changed. Min. 1 character, max. 60 characters. Only characters of the English alphabet (a-z, A-Z), digits (0-9), and the special characters "_" and "-" may be used.

9.5.1.7 Resetting to factory settings

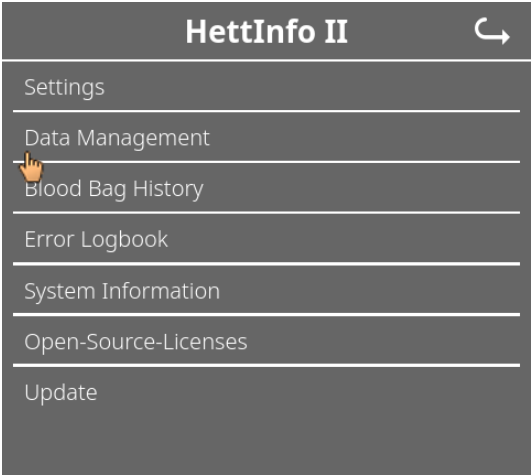|	
HettInfo Application	⬤
HettInfo Settings	
Process Data Setup	
CSV-File Setup	
Automatic Database Backup	⬤
Automatic Process Data Export	⬤
Centrifuge Name	
Restore Factory Settings	

By tapping, the HettInfo is reset to factory settings. (This function is reserved for the Service department.)
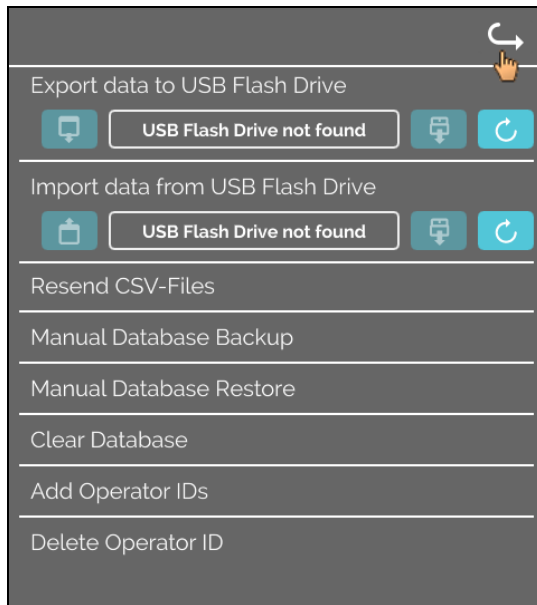
9.5.2 Data management

The menus are called up by tapping the text.

To get back to the previous menu, use the arrow at the upper right in the activated menu.

Setup menu

HettInfo II ↵

Settings

Data Management

Blood Bag History

Error Logbook

System Information

Open-Source-Licenses

Update

Menu
"Data
management"

☞ USB sticks may only contain one partition. USB sticks with multiple partitions cause undefined system behaviour.

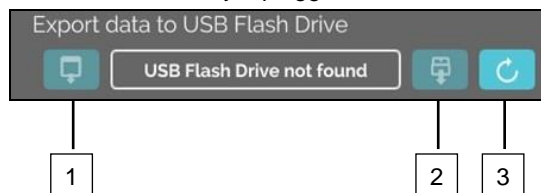| Resend CSV-Files | CSV files are sent to the set destination (see 9.5.1.5). Existing files at this destination will be overwritten. You must confirm the operation. |
Manual Database Backup	The action starts a database backup at the selected destination (see 9.5.3.1). You must confirm the operation.
Manual Database Restore	The selected destination is checked for backup files. If there are any, they are displayed and restoration can be started.
Clear Database	This action resets the database and deletes all CSV files in the HettInfo II. You must confirm the operation.
Add Operator IDs	This action will lead you to a field, in which you can enter a new operator ID. Then you must scan in the corresponding barcode.
Delete Operator ID	A list with all operator IDs will be displayed. By selecting an operator ID, you can delete this after the desired confirmation.

9.5.2.1 Export

The export function is accessible by tapping the text. The data (CSV files and operator IDs) can only be transferred via the USB port.

If a USB stick is not yet plugged into the slot, the following screen is displayed.
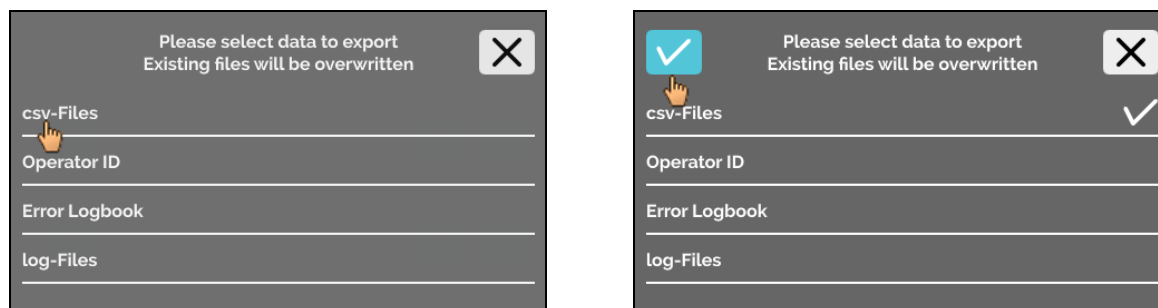

[1]   Access to the export subscreen

[2]   Unmount

[3]   Mount (System update. This starts detection of the USB stick.)

If a USB stick is plugged in but is not yet detected by the system, the USB stick can be mounted by tapping the right button [3].
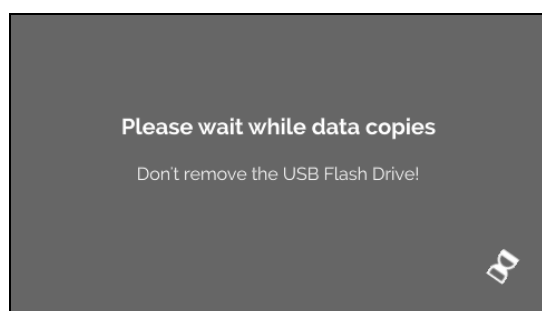
If a USB stick is detected then, the export subscreen can be opened by tapping the left button [1].
If the USB stick is not detected, repeat the action with button [3]. If that is not successful, you have to use another USB stick.
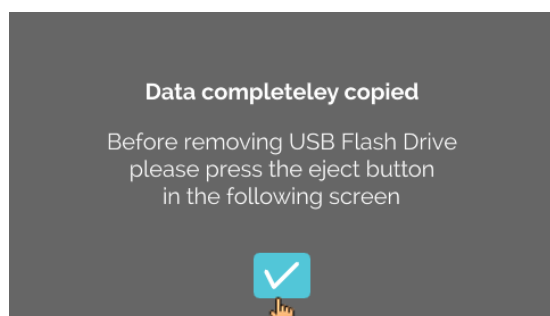
Export subscreen

A manual export of the CSV files (resending CSV files) is only possible if CSV files also exist.
Exportable files are displayed here and can be selected. The files selected by tapping are marked with a checkmark. The export is started by tapping the blue checkmark.

As long as data is being exported, the USB stick must not be disconnected from the system.
It is exported to the root directory of the export destination (USB stick).
If files with identical names exist at the destination, these will be overwritten without warning.

Waiting screen is displayed for at least 5 seconds.

Once the data export is completed, a message will appear which must be confirmed by tapping the checkmark. Afterwards, you will be returned to the export screen.
The USB stick can be safely removed by first pressing the "Unmount" button and then disconnecting the USB stick from the system.

The exported CSV files contain the centrifuge name in the file name, which is set under 9.5.1.6.

In order to show the data acquired with HettInfo II correctly in Excel, the text conversion must be set to UFT-8 in Excel for the import of the CSV data.
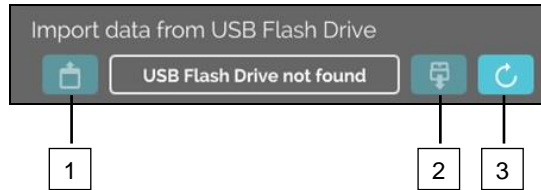When opening data acquired with HettInfo II, it must be made sure that Excel is set such that leading zeros are displayed.

If the user deletes the database, all CSV files in the HettInfo II will also be deleted automatically (no process data = no CSV files). The CSV files, however, are not deleted at the export destination.

9.5.2.2 Import

The import function is accessible by tapping the text. The data can only be transferred via the USB port.

If a USB stick is not yet plugged into the slot, the following screen is displayed.

[1]   Access to the import subscreen
[2]   Unmount
[3]   Mount (System update. This starts detection of the USB stick.)

If a USB stick is plugged in but is not yet detected by the system, the USB stick can be mounted by tapping the right button [3].
If the USB stick is not detected, repeat the action with button [3]. If that is not successful, you have to use another USB stick.
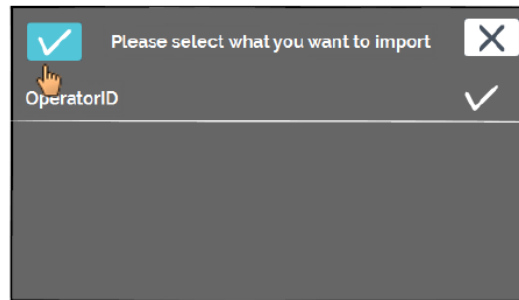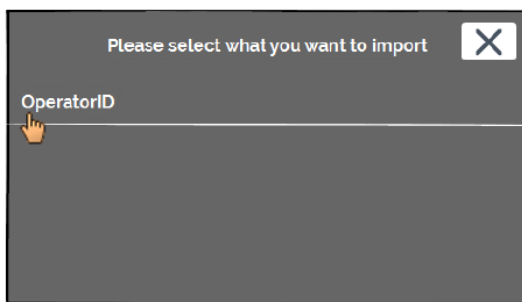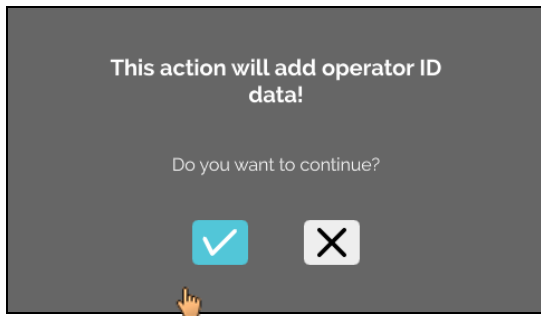
Import subscreen

- **Import of the operator ID**

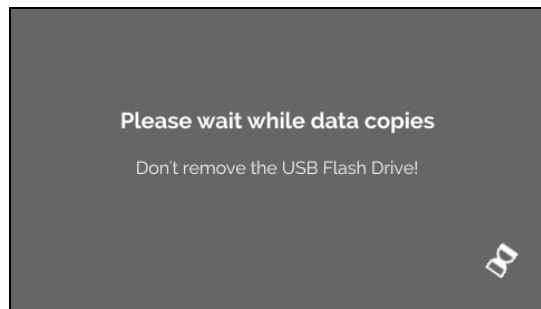   Importable files are displayed here and can be selected.
    For the creation of the operator ID list, see chapter 10.
    The files selected by tapping are marked with a checkmark. The import is started by tapping the blue checkmark.
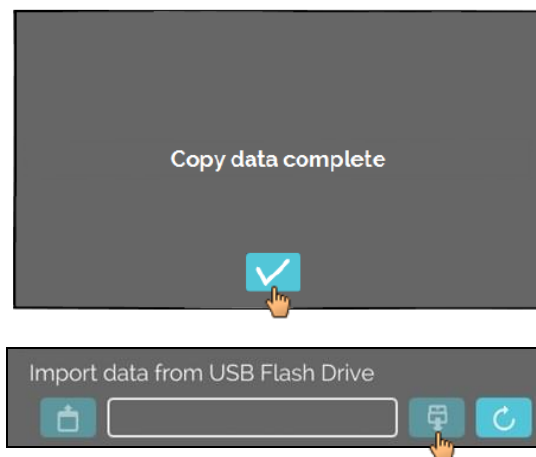
This operation must be confirmed by tapping the blue checkmark.

Waiting screen is displayed for at least 5 seconds.

The operator IDs are added to the already existing operator IDs. The operator IDs can generally be repeatedly imported. Also, operator IDs which are already in the system are not overwritten by another import.

Once the data import is completed, a message will appear which must be confirmed by tapping the checkmark. Afterwards, you will be returned to the import screen.
The USB stick can be safely removed by first pressing the "Unmount" button and then disconnecting the USB stick from the system.
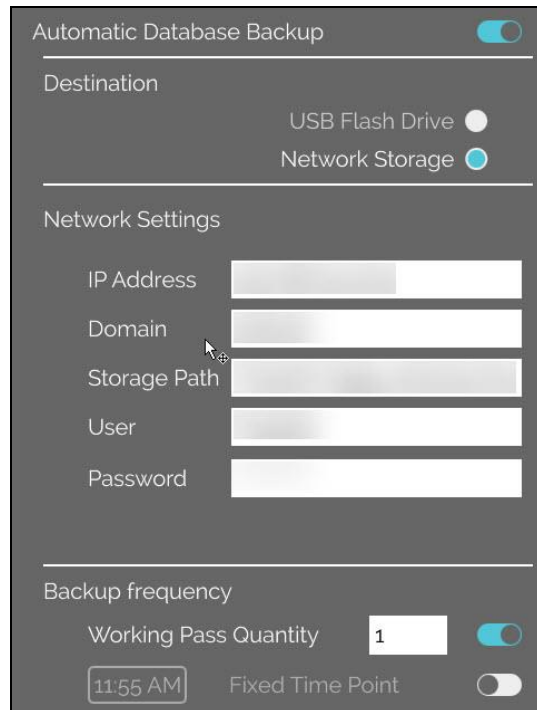
- **Import of the database**

  A database restoration can only be done from a USB stick. Only one backup file may be on the stick at any one time, which must be operated from the root directory of the USB stick.

9.5.3 Database backup

The database (DB) backup creates a file, which contains the contents of the database of the HettInfo II at the time of creation.
This backup is for securing the database in the event of a hardware error.
The backup file is a password-protected ZIP file.

9.5.3.1 Automatic database backup

Automatic Database Backup ⬤	Activate and deactivate the automatic database backup.
Destination	
USB Flash Drive ⦿	
Network Storage ⦿	Export destination of the backup
Network Settings	
IP Address	
Domain	Network settings
Storage Path	
User	
Password	
Backup frequency	
Working Pass Quantity 1 ⬤	The backup frequency is set here.
11:55 AM Fixed Time Point ⬤	Either after a defined number of centrifugation runs or at a fixed time within the current day.

☞ Information about the IP address is to be obtained from the system administrator.
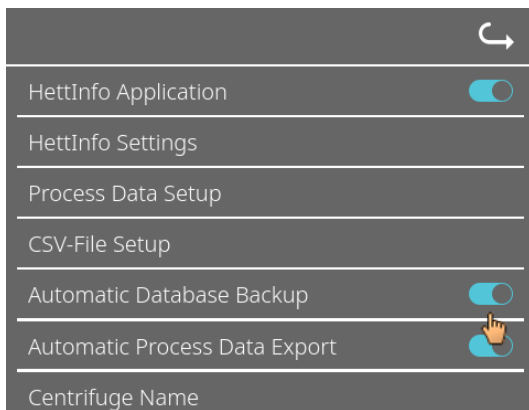
☞ The following input limits exist for the network settings of the "automatic process data export" as well as the "automatic database backups":

Storage path length	Min. 1 character, max. 255 characters
Domain name length	Min. 1 character, max. 63 characters
IP length	IPV4 format only
Length of the user name	Min. 1 character, max. 255 characters
Length of the password	Min. 1 character, max. 255 characters

Hettich recommends using a server for storing data on a network drive (Linux or Windows).

1. If applicable, plug in USB stick.
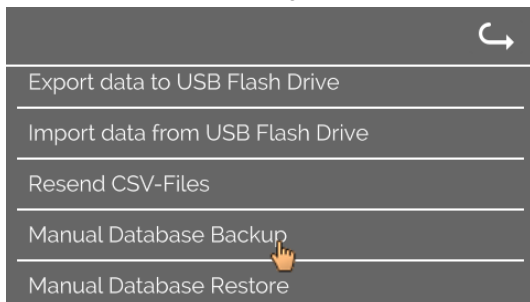2. Open the "Settings" menu; see chapter 9.5.1 „Settings".

	3. Activate/deactivate the "Automatic database backup".

4. Select the export destination.
   The export destination describes the location at which the database backup is stored.
   This setting applies globally for all export actions of the database backup.
   Even if the "Automatic database backup" itself is deactivated.

5. Make network settings. Consult the network administrator for this data.

6. Set the frequency of the database backup.

- "Centrifugation runs":
  Number of centrifugation runs, after which a database backup is performed and then exported. (Setting range from 1 to 999)
- "Fixed time":
  Fixed time within 24h, at which a database backup is created and then exported. (Setting range from 12:00 a.m. to 11:59 p.m.)
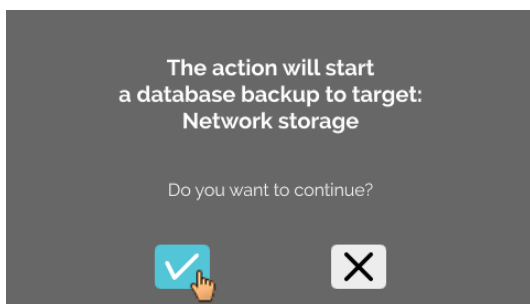
It is possible to activate "Centrifugation runs" and "Fixed time" individually or combined.
The settings are always active as long as "Automatic database backup" is active.
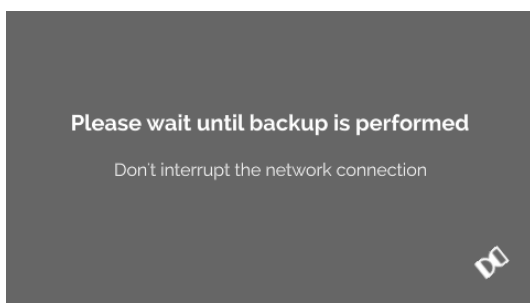
9.5.3.2 Manual database backup

1. If applicable, plug in USB stick.
2. Open the "Data management" menu; see chapter 9.5.2 „Data management".

	3. Select "Manual database backup".
	4. Confirm the query or cancel.
	While the function is being executed, this information screen appears.

5. Confirm the query.
   ➔ Database backup has been completed.

9.5.3.3 Restoring a database backup

This function is for restoring the database from a DB backup. The restoration must always be started manually.
The DB backup file must be on a USB stick. The USB stick may only contain one DB backup file. The DB backup file must be stored in the master directory of the USB stick.

The database version of the DB backup must be compatible with the database version of the current HettInfo II.

During restoration, the following steps are performed automatically:
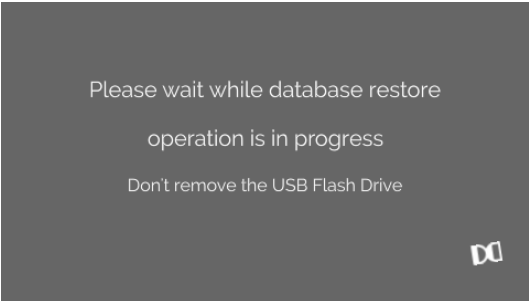1. Check, whether the DB backup file can be used by the HettInfo II.
2. Delete the database in the HettInfo II and all CSV files in the HettInfo II.
3. Install the database from the DB backup.
4. Regenerate the CSV files from the content of the database from step 3.

The file name of the DB backup file is structured as follows: Part1_Part2_Part3_DBbackup.zip
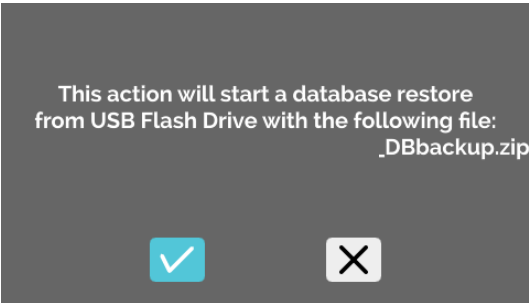
Part1_	Part2_	Part3_	DBbackup.zip
Name of the centrifuge_	Date of the DB backup creation_	Time of the DB backup creation_	Fixed text

Based on Part1; Part2; Part 3, select the desired DB backup file and copy it to a USB stick.

1. If applicable, plug the USB stick into the HettInfo.
2. Open the "Data management" menu; see chapter 9.5.2 „Data management".
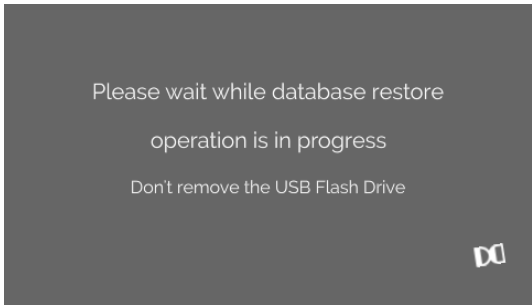
3. Select "Manual database backup".

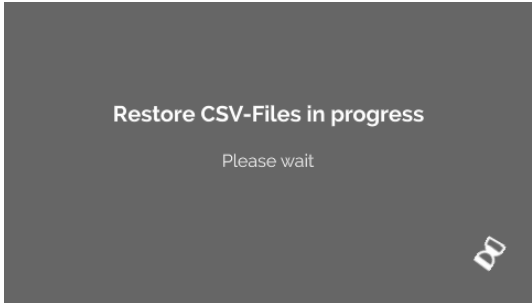After starting the function, the DB backup file is checked for conformity.
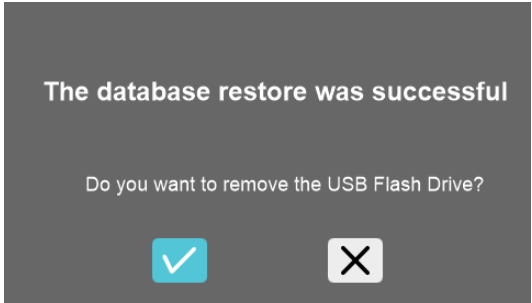
Check was successful.

4. Confirm the query or cancel.
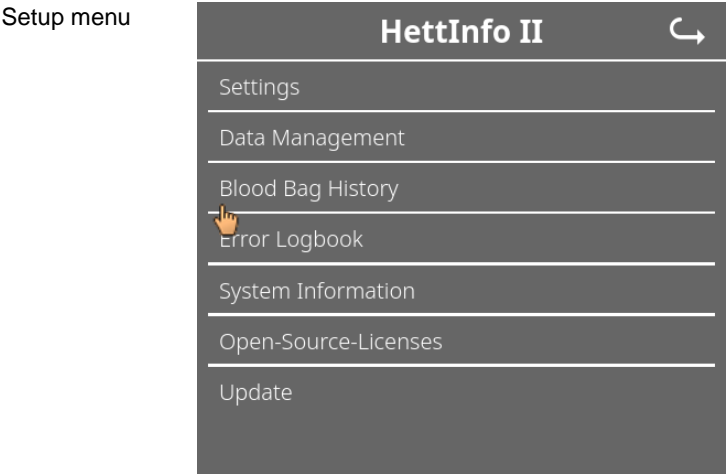
Please wait while database restore

operation is in progress

Don't remove the USB Flash Drive

The database is restored.

Restore CSV-Files in progress

Please wait

CSV files are regenerated.

The database restore was successful
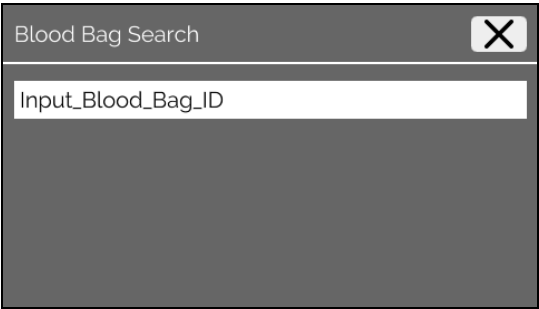
Do you want to remove the USB Flash Drive?

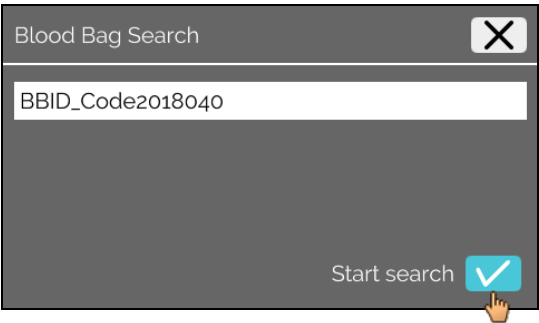5.   Confirm the query or cancel.

9.5.4 Blood bag history

The menus are called up by tapping the text.

To get back to the previous menu, use the arrow at the upper right in the activated menu.

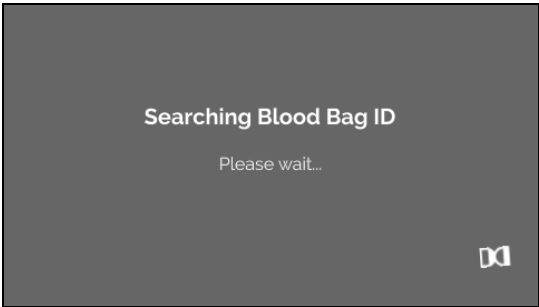Setup menu

"Blood Bag History" menu

By tapping the "Search for ID" button on the right side of the screen, you will go to the "Blood Bag Search" screen.

After entering the sought blood bag barcode, the screen will look like this:
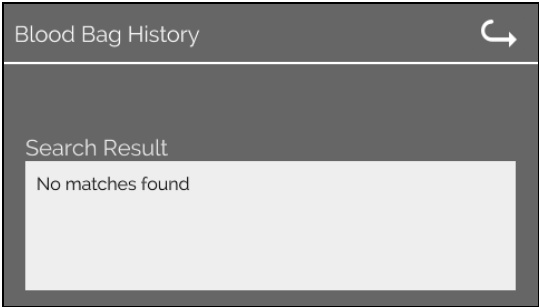
After tapping the "Start search" button, the "Searching Blood Bag ID" screen will appear for the duration of the blood bag search.

Searching Blood Bag ID

Please wait...

If the system has found a blood bag code, this screen will appear:

Blood Bag History

Search Result

BBID_Code2018040 | 24/May/2019 | 08:10 AM
BBID_Code2018040 | 24/May/2019 | 08:03 AM
BBID_Code2018040 | 23/May/2019 | 07:23 AM
BBID_Code2018040 | 22/May/2019 | 10:11 AM
BBID_Code2018040 | 16/May/2019 | 08:03 AM

If the system has not found a blood bag code, this screen will appear:

Blood Bag History

Search Result
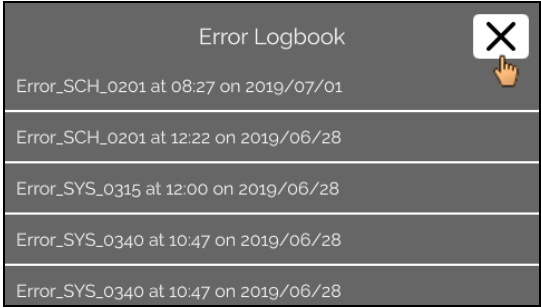
No matches found

9.5.5   Error logbook

The menus are called up by tapping the text.

To get back to the previous menu, click the "X" at the upper right of the activated menu.
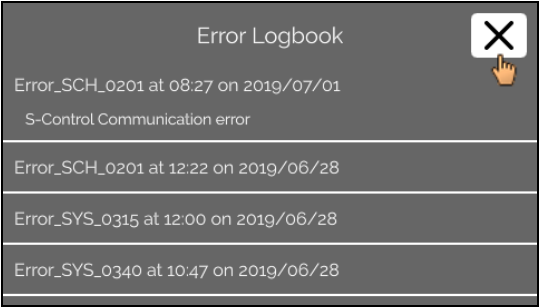
Setup menu

"Error
Logbook"
menu

The error logbook shows a list of error messages with the time and date.

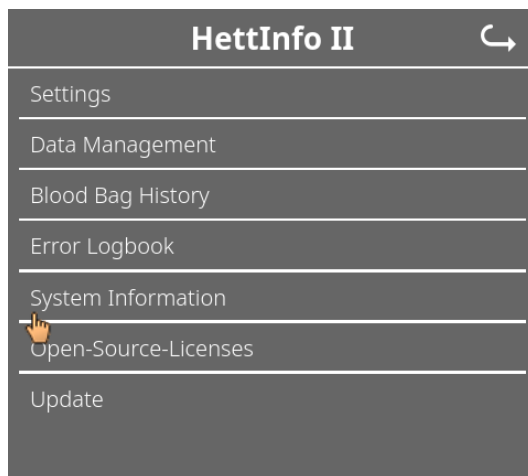If you tap an error message, detailed information about this error will appear.

The error logbook is closed by tapping the "X" at the upper right of the screen.
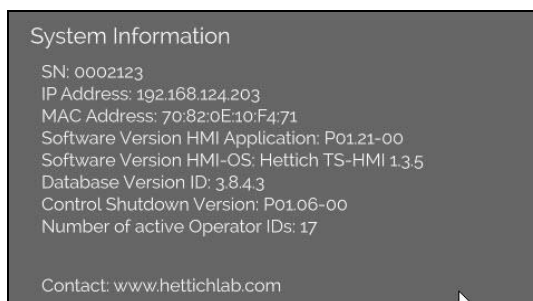
9.5.6 System information

This window is called up by tapping the text.

To get back to the previous menu, use the arrow at the upper right in the activated window.

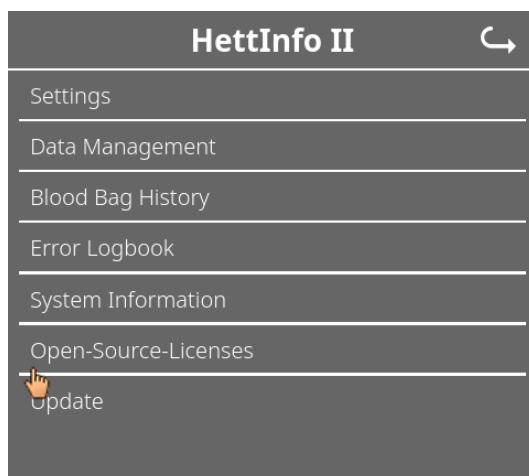Setup menu

"System Information" window

9.5.7 Open-source licenses

The menus are called up by tapping the text.

To get back to the previous menu, use the arrow at the upper right in the activated menu.
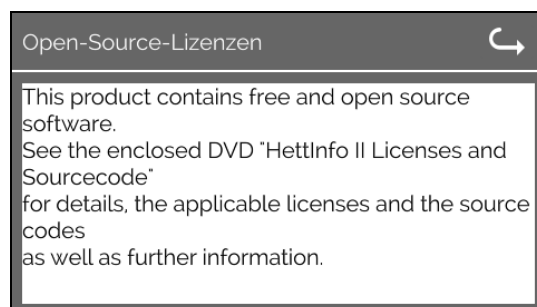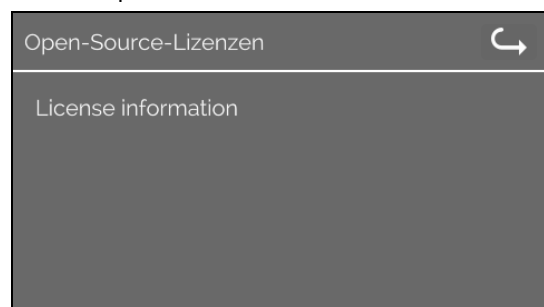
Setup menu

The license viewer behaves like a file explorer.

Background colour dark = display of folder content

Background colour white = display of the content of a text file

- If "License Information" is tapped, the license text opens.

10   Creation of the operator ID list

In the delivered state, no operator IDs are set. In order to be able to use the HettInfo II, operator IDs must be created in a text file (*.txt) and imported in the system (for the import, see chapter 9.5.2.2).

The text file (*.txt) must be structured as follows in order to be able to import the operator IDs into the system:

```
OperatorID_Data_HettInfo_2
Name  Barcode     Status
Operator001     BC01  1
Operator002     BC02  1
Operator003     BC03  1
```

[1]   Line 1:

OperatorID_Data_HettInfo_2

☞   Only this designation may be used.

[2]   Line 2:

Name   Barcode   Status

☞   Only these three words may be used and they must be placed in this order.
The words must be separated by one "tab" ("Tab" key).

[3]   Line 3:

Data is input starting from this line.

☞   Each line contains a data set, and the data must be separated by one "tab" ("Tab" key).

[4]   Name:

Indicates the name of the operator. The operator name must be at least 1 character long and may not exceed 60 characters.
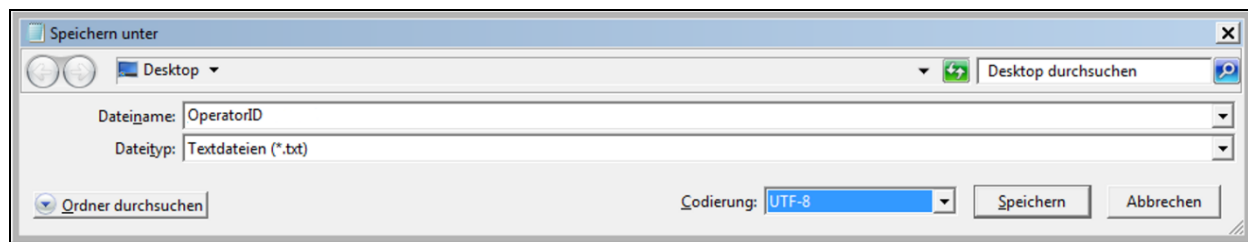
[5]   Barcode:

Here, the barcode information is allocated to the operator. The barcode must be at least 4 characters long and must not exceed 32 characters.
Barcode type "code 128" must be used.

[6]   Status:

The operator status is specified here. The status must always be 1.

☞   The created file must be saved in UTF-8 format under the following file name:
OperatorID.txt

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The DVD contains the following files/folders:

File	Content
File u-boot-*.*	Folders with the license text of the uboot bootloader components
gelin2-21.10-imx6-x86_64.tar.*	Complete Linux packet (GELinBSP) incl. license info and source code
HettInfo-GELin_KernelV5.4.196_Lizenzinformationen.txt	Links to the license info of the Linux Kernel V5.4.196
hettinfo-gelin2_21.10-bom.csv	List of all GELin components with detailed information to the licenses
hettinfo-gelin-license-information.*	License text files (txt and HTML)
linux-5.4.196-ge-22.04+-exceed_ts-hmi-hettich.zip	Linux Kernel V5.4.196 (adapted for the use with the HMI electronic board)

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