# SAFE® CAP 48 CHANNEL DD


# ORIGINAL INSTRUCTION MANUAL

LVL technologies

# DE-CAPPER

# SAFE® CAP 48 CHANNEL DD

## Contents

# 1. INTRODUCTION

Thank you for purchasing the SAFE CAP 48 CHANNEL DECAPPER.

This instruction manual is a user guide for the device. Each of the operators is obliged to become familiar with its content in an understandable manner and observe its provisions. The manual contains regulations related to the operating safety, which must be followed at all times. The manufacturer will not be held responsible for any use of the device which is not compliant with this manual. The manual must be kept by a responsible person and must be accessible to its owners for reference in any situation. If any of the elements of the manual is not understandable to you, please contact the manufacturer.

The following symbols are used in this manual:

MEANS THE CONTENT WHICH IS PARTICULARLY IMPORTANT OR THAT THERE IS A RISK.

MEANS GUIDANCE ON HOW TO PROCEED

This manual is addressed to persons who have contact with the device at each stage of its life, e.g. during the following activities:

- Operation
- Transport  Assembly
- Disassembly
- Maintenance
- Repair
- Cleaning

# 2. DESCRIPTION OF THE MACHINE

## 2.1 GENERAL DESCRIPTION

The SAFE CAP 48 CHANNEL DECAPPER is a laboratory device used for simultaneous capping and decapping of tubes by the specialist laboratory staff. The only proper destination of the device is its use in accordance with its intended purpose described in section 3 of this manual. In particular, the device must not be used in a manner specified in chapter 4 of this instruction manual.

## 2.2 APPLIED DIRECTIVES AND STANDARDS

The device has been manufactured based on the current requirements applicable within the European Economic Area. The DECAPPER carries the CE mark. The Declaration of Conformity which confirms the fulfilment of the following guidelines has been issued for the device:

- MACHINE DIRECTIVE 2006/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 17 MAY 2006.  DIRECTIVE 2014/35/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 26 FEBRUARY 2014 ON THE HARMONISATION OF THE LAWS OF THE MEMBER STATES RELATING TO THE MAKING AVAILABLE ON THE MARKET OF ELECTRICAL EQUIPMENT DESIGNED FOR USE WITHIN CERTAIN VOLTAGE LIMITS.  DIRECTIVE 2014/30/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 26 FEBRUARY 2014 ON THE HARMONISATION OF THE LAWS OF THE MEMBER STATES RELATING TO ELECTROMAGNETIC COMPATIBILITY.

- DIRECTIVE 2011/65/EU OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL OF 8 JUNE 2011 ON THE RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT.

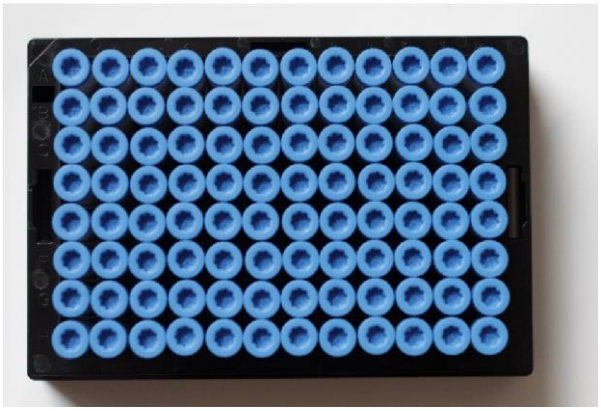
During the compliance assessment process, the manufacturer applied the following technical specifications:

- PN-EN ISO 12100:2012 *Safety Of Machinery - General Principles For Design -Risk Assessment And Risk Reduction*

## 2.3 APPLIED PADS

Pads used in the device are divided into two types:

- LVL RACKS with different heights depending on the tube capacity – further referred to as ”RACKS”.

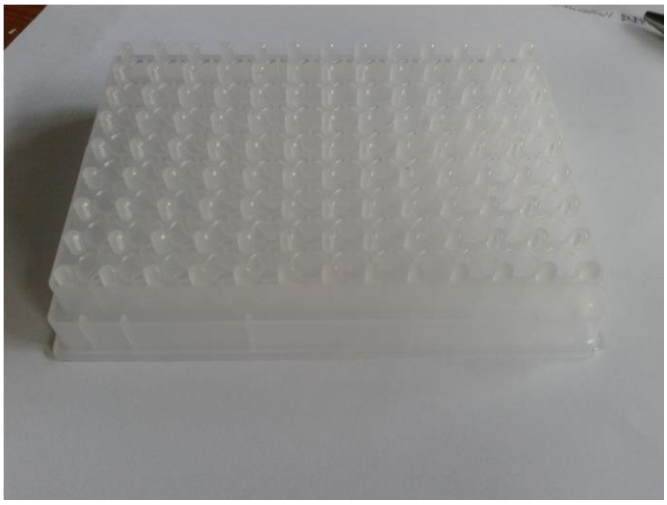


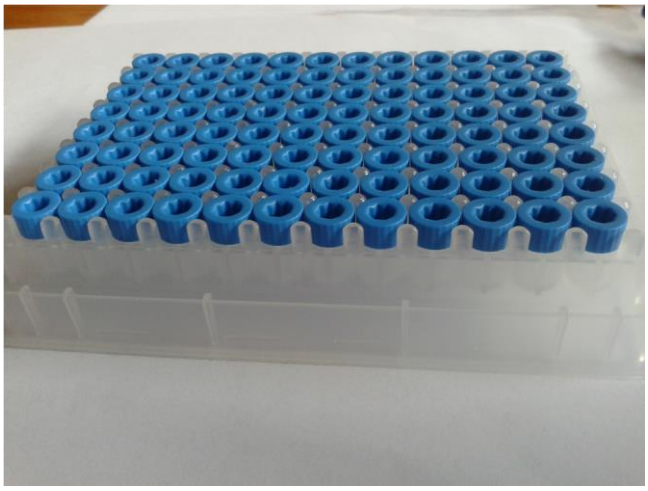

Each RACK has 96 fields which consist of 12 columns (marked by numbers from 1 to 12) and 8 rows (marked by letters from A to H).

IN ORDER TO HAVE THE DEVICE PERFORM ITS FUNCTIONS PROPERLY, EACH ROW (A-H) OF THE RACK MUST CONTAIN AT LEAST ONE TUBE.

- LVL CAPRACKS– further referred to as ”CAP RACKS”.

IN ORDER FOR THE DEVICE TO PERFORM ITS OPERATIONS PROPERLY, AT LEAST ONE CAP SHOULD BE PRESENT IN EACH CAPRACK ROW (A-H) FOR THE ”RETRIEVE” FUNCTION. NO CAP CAN BE PRESENT IN THE CAPRACK FOR THE ”STORE” FUNCTION.





## 3. INTENDED USE OF THE DEVICE

DECAPPER is used for simultaneous decapping and capping of LVL tubes – SX200, SX280, SX300, MX500, LX1000, placed on LVL RACKS compliant with ANSI/SLAS, 6-2012. The device also serves the purpose of storing and retrieving caps for the above-mentioned tubes on LVL CAPRACKS compliant with ANSI/SLAS, 6-2012.

The description of the used RACKS AND CAPRACKS can be found in section 2.4 of this instruction manual.

The DECAPPER is designed for use in specialised laboratories which require the frequent decapping and capping of LVL tubes.

The device is adapted to the reading of barcodes located on the shorter RACK side.

The device may also be controlled from the external system by means of the RS232 interface (USB port, type B).

IT IS PROHIBITED TO USE THE DEVICE FOR PURPOSES OTHER THAN INTENDED. THE USE OF THE DEVICE FOR OTHER PURPOSES MUST BE REGARDED AS MISUSE. THE RISK ASSESSMENT PERFORMED BY THE MANUFACTURER ONLY REFERRED TO THE ABOVE-MENTIONED TYPES OF TUBES MANUFACTURED BY LVL.

# 4. WARNINGS REGARDING THE PROHIBITED METHODS OF USE

The prohibited methods of use of the DECAPPER may entail serious consequences for operators of the device and persons present in the direct operating area of the machine, related to its safe and proper operation.

THE MANUFACTURER IS NOT LIABLE FOR ANY CONSEQUENCES OF THE IMPROPER USE OF THE DEVICE.

In particular, the prohibited methods of use of the device are understood as follows:

- The use of the device which is not compliant with section 3 of this instruction manual (the use of RACKS, CAPRACKS and tubes not mentioned above)
- Any modification of the elements of the device
- Any modification of the operating parameters of the device
- The installation of spare parts other than those listed in the instruction manual, in the chapter entitled ”SPECIFICATION OF SPARE PARTS”
- The use of the device in the event of detection of any irregularities
- The use of the device with dismantled guards (e.g. casing or door of the device)

- Any upgrades, repairs, cleaning, maintenance performed without disconnection of power supply
- Any upgrades, repairs or maintenance performed by the personnel with no electrical licences (minimum SEP 1kV) to work with electric machinery
- The use in the area exposed to the impact of weather conditions (water, air humidity above 60%)
- The use at ambient temperatures below 10°C or above 30°C
- The operation of the device during consumption of meals or beverages
- The transport of the device in a position other than vertical
- The transport of the device in a different manner than by means of a transport box supplied by the manufacturer
- Filling, replenishing of the tubes located on the tray of the device.
- The use of the device before its prior connection to the wiring system provided with residential current devices
- Failure to observe the ”risk reduction measures” included in chapter entitled ”DESCRIPTION OF THE RESIDUAL RISK”
- Failure to observe any other instructions included in this instruction manual

# 5. TECHNICAL DATA

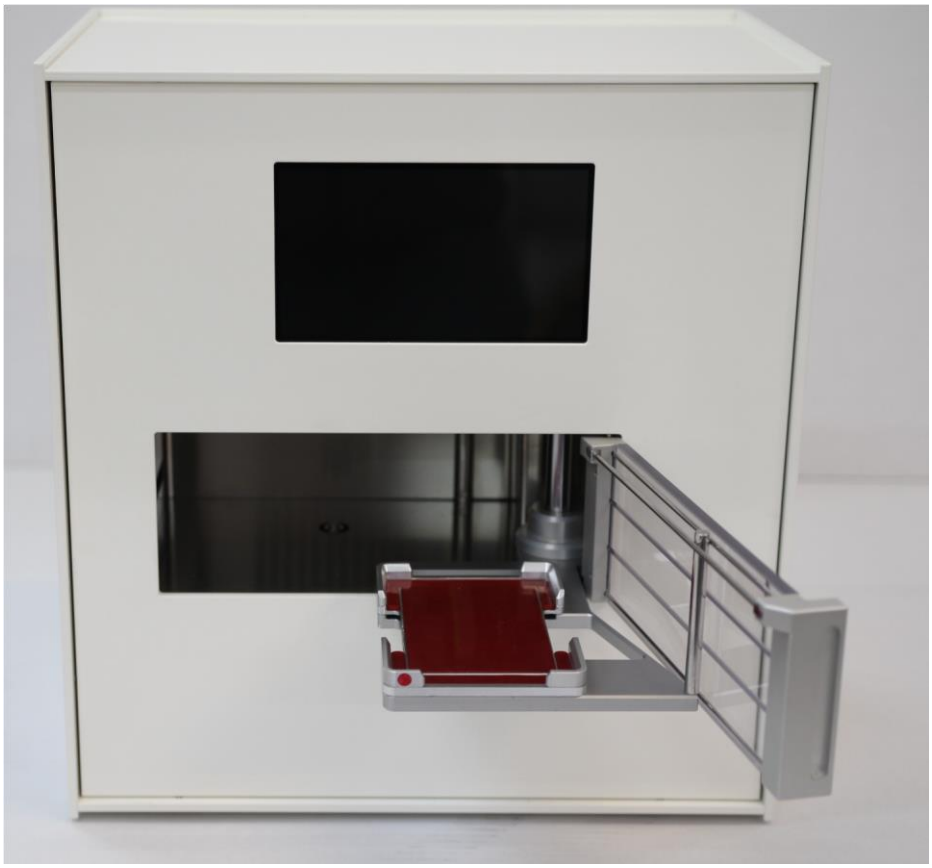
## 5.1 MACHINE PARAMETERS

The basic parameters of the device are presented in the table below:

| LP | PARAMETER | VALUE |
|---|---|---|
| *1* | *Input voltage* | *AC – 110-230V* |
| *2* | *Frequency* | *50/60Hz* |
| *3* | *Power* | *90 W* |
| *4* | *Weight* | *33kg* |
| *5* | *Operating range - temperature* | *10°C - 30°C* |
| *6* | *Operating range - humidity* | *0 – 60%* |

## 5.2 WORK STATIONS

The only work station at the device is located in front of the DECAPPER's door.



## 6. DESCRIPTION OF THE RESIDUAL RISK

The manufacturer of the machine has conducted the risk estimation process, whose results identified the risks related to the use of the device. Most of the risks were eliminated at the design stage by using the technical protection measures.

Residual risk is the risk which exists despite the use of technical preventive measures. The description of the remaining residual risk and warnings related to the risk are provided below.

FAILURE TO FOLLOW THE INFORMATION INCLUDED IN THE COLUMN ENTITLED ”RISK REDUCTION MEASURES” AND OTHER INFORMATION IN THIS INSTRUCTION MANUAL MAY RESULT IN THE OCCURRENCE OF ONE OR MORE OF THE RISKS LISTED BELOW.

| RISK | POTENTIAL CAUSE | RISK REDUCTION MEASURES |
|---|---|---|
| *Electric shock* | *Unauthorised access to the interior of the machine* | *Do not open the fixed/movable guards when the device is switched on* |
| *Shorting of electrical components* | *Contact of electrical components of the device with water* | *Do not consume meaLs and beverages during work* |
| *Injury* | *Contact with movable components by putting your hands through open door* | *Do not put your hands into the device when it is switched on.*<br><br>*Do not open the fixed/movable guards when the device is switched on.* |
| *Crushing a body part* | *Loss of stability of the device during transport* | *Transport the device only in the transport packaging supplied by the manufacturer.* |
| *Damage to eyesight* | *Deflection of the laser beam which has its source inside the machine* | *Do not put your hands or any other body part into the device when it is switched on.* |

## 7. USE OF PERSONAL PROTECTION EQUIPMENT

The use of personal protection equipment is not required by the manufacturer of the device.

# 8. MINIMUM REQUIREMENTS FOR USERS

## 8.1 MINIMUM QUALIFICATIONS

The table below presents the minimum requirements for users of the device:

| ACTIVITY | REQUIREMENT |
|---|---|
| *Standard operation* | *The obligation to become familiar with the instruction manual.* |
| *Cleaning* | *The obligation to become familiar with the instruction manual.* |
| *Repair, maintenance* | *Required electrical licence up to min. 1kV (e.g. SEP),*<br>*The obligation to become familiar with the instruction manual.* |
| *Disassembly* | *Required licence to receive waste.* |

## 8.2 TRAINING FOR OPERATORS

The training for operators at the work station, other than that required by the provisions of law, is not required by the manufacturer of the device.

# 9. COMMISSIONING OF THE DEVICE

## 9.1 ASSEMBLY OF COMPONENTS OF THE DEVICE

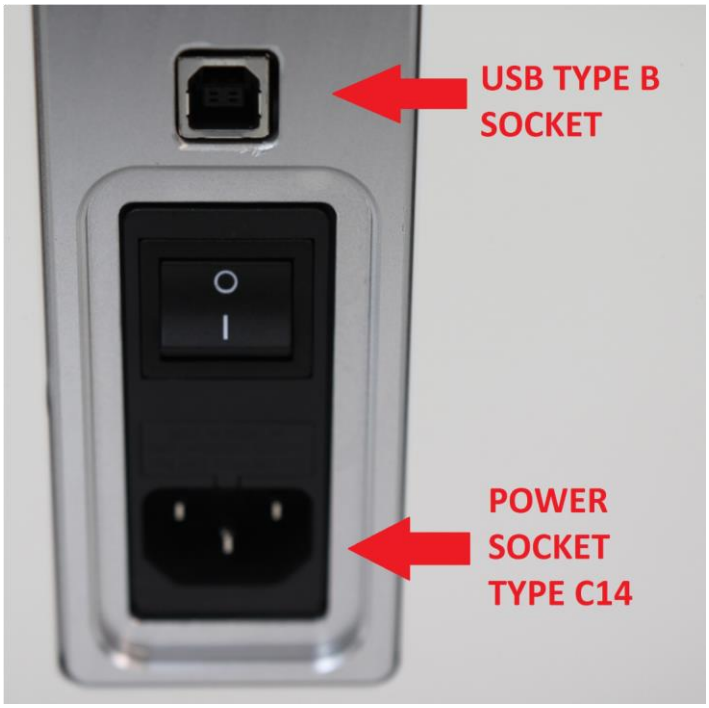
The device supplied to the Customer is complete and does not require any assembly activities.

## 9.2 MINIMUM OPERATING CONDITIONS FOR THE DEVICE

The minimum operating conditions for the device are specified in sections 1, 2, 5 and 6 of the table presented in section 5.1 of this instruction manual.

## 9.3 FIRST START-UP

The device must be connected to the mains by means of the C14 power socket. During the activities related to the first start-up, verify the completeness of the guards (secured casing, closed door) and check the position of the power switch (in this situation, it needs to be set to the ”0” position).




THE DEVICE MAY BE CONNECTED TO THE AC MAINS SUPPLY WITHIN THE VOLTAGE RANGE BETWEEN 110 V AND 230 V. THE INTEGRATED POWER ADAPTER OF THE DEVICE REQUIRES NO SETTING ACTIVITIES IN CONNECTION WITH THE BROAD VOLTAGE RANGE.

# 10. OPERATION

## 10.1 DESCRIPTION OF THE MAIN CONTROL PANEL (MAIN SCREEN)

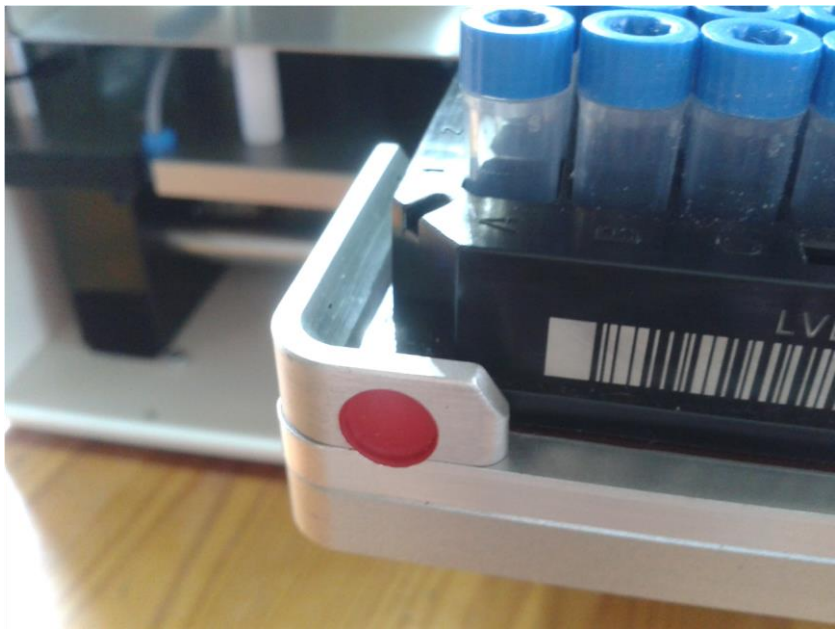
| FUNCTION | DESCRIPTION |
|---|---|
| *DECAP* | This function is used for decapping of the capped RACKS |
| *CAP* | This function is used for capping the previously decapped RACKS by means of caps inside the device. |
| *STORE* | This function is used to store caps inside the device on the CAPRACK. |
| *RETRIEVE* | This function is used to retrieve caps from the CAPRACK. |
| *INFO* | This function displays the information about the device and its software, the counter of performed operations and the list of recent operations from the moment of activation of the device. |
| *SETTINGS* | This function enables the setting of the device and the entry into the service mode. |

## 10.2 DECAP FUNCTION

The DECAP function is responsible for the decapping of the capped tubes.

IN ORDER TO ACTIVATE THE DECAP FUNCTION, THERE MUST BE NO CAPS IN THE DEVICE.

- After touching the ”DECAP” button located on the main screen, the door with the tray will be opened automatically. The ”DOOR OPENING” message will appear on the display.
- Place the RACK with capped tubes on the extended tray. Pay particular attention to the correct RACK placement – the cut-off corner of the rack must be located at the place marked with a red point.



- In order to proceed with the decapping of the tubes, press the ”START” button on the display.


- If the barcode scanner is switched on, the device will automatically recognise the code located on the RACK. The rack code and the tube type will be displayed on the screen.


- If the barcode scanner is switched off, the device will only recognise the tube type.

- The device will automatically activate the tube decapping function.

NOTE! AFTER THE CORRECT PERFORMANCE OF THE OPERATION, THE DOOR WITH THE TRAY WILL BE OPENED AUTOMATICALLY. MAKE SURE THAT NO OBJECTS WHICH COULD LEAD TO A COLLISION ARE LOCATED BEFORE THE DEVICE.

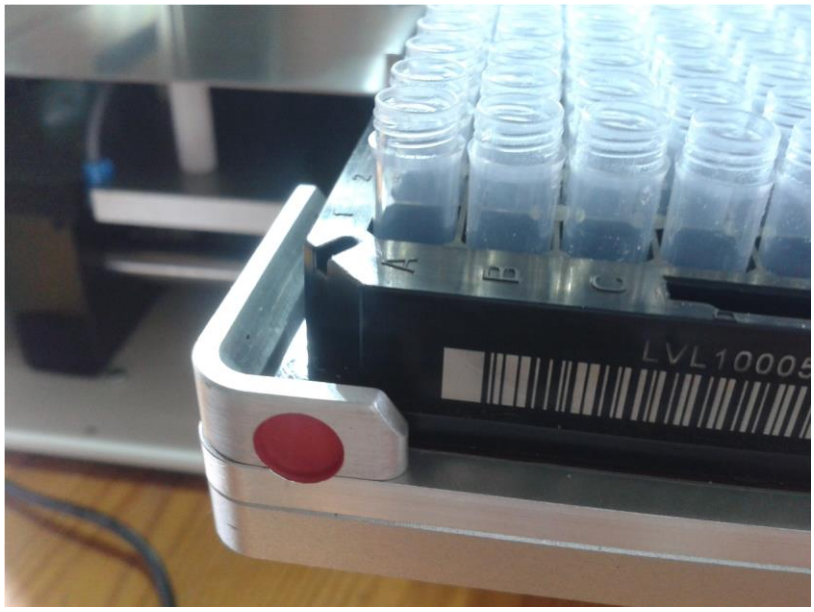
- The decapping operation is completed. The previously decapped caps are inside the device.

## 10.3 CAP FUNCTION

The CAP function is responsible for the capping of decapped tubes.

IN ORDER TO BE ABLE TO ACTIVATE THE CAP FUNCTION, THE PREVIOUSLY DECAPPED CAPS (OR THOSE RETRIEVED FROM THE CAPRACK) MUST BE INSIDE THE DEVICE.

- After touching the ”CAP” button located on the main screen, the door of the device with the tray will be opened automatically. The “DOOR OPENING” message will pop up on the screen.
- Place the RACK with decapped tubes on the extended tray. Pay particular attention to the correct placement of the racks – the cut-off corner of the rack must be located at the place marked with a red point.



- In order to proceed with the capping of the tubes, press the ”START” button on the display.


- If the barcode scanner is switched on, the device will automatically recognise the code located on the
  RACK. The rack code and the tube type will be displayed on the screen,


- If the barcode scanner is switched off, the device will only recognise the tube type.

- The device will automatically activate the tube decapping function.

NOTE! AFTER THE CORRECT PERFORMANCE OF THE OPERATION, THE DOOR WITH THE TRAY WILL BE OPENED AUTOMATICALLY. MAKE SURE THAT NO OBJECTS WHICH COULD LEAD TO A COLLISION ARE LOCATED BEFORE THE DEVICE.

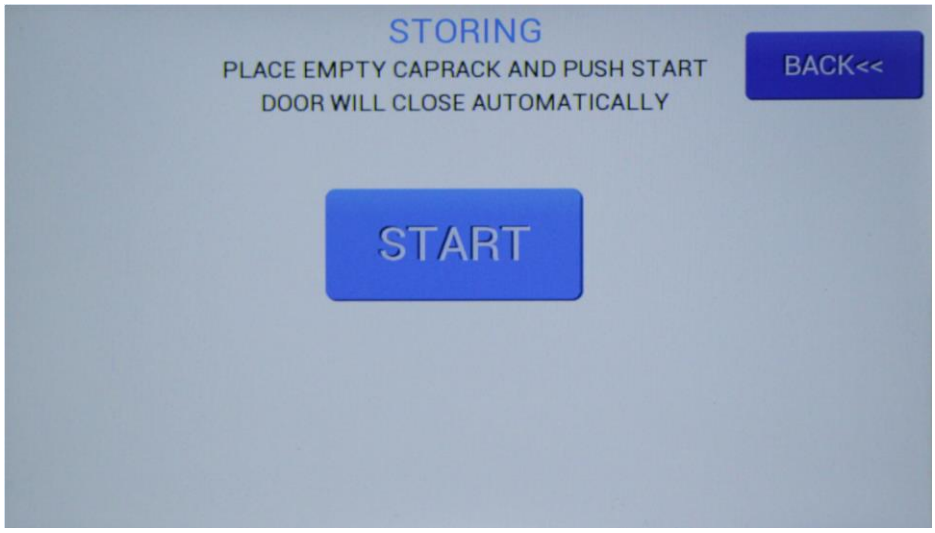
- The capping operation is completed. The previously decapped caps (or those retrieved from the CAPRACK) are located on tubes placed on the RACK.

## 10.4 STORE FUNCTION

The STORE function is responsible for storing the caps located in the device on the CAPRACK.

IN ORDER TO ACTIVATE THE STORE FUNCTION, THE CAPS WHICH WERE PREVIOUSLY DECAPPED (OR RETRIEVED FROM THE CAPRACK) MUST BE INSIDE THE DEVICE.

- After touching the ”STORE” button located on the main screen, the door of the device with the tray will be opened automatically. The “DOOR OPENING” message will appear on the display.
- Place the empty CAPRACK on the extended tray.
- In order to proceed with the storing of the caps, press the ”START” button located on the display.




- The device will automatically activate the cap storing function.

NOTE! AFTER THE CORRECT PERFORMANCE OF THE OPERATION, THE DOOR WITH THE TRAY WILL BE OPENED AUTOMATICALLY. MAKE SURE THAT NO OBJECTS WHICH COULD LEAD TO A COLLISION ARE LOCATED BEFORE THE DEVICE.

- The cap storing operation is completed. The previously decapped caps (or those retrieved from the CAPRACK) are located on the CAPRACK.

## 10.5 RETRIEVE FUNCTION

The RETRIEVE function is responsible for retrieving the caps located on the CAPRACK.

IN ORDER TO ACTIVATE THE RETRIEVE FUNCTION, THERE CAN BE NO CAPS INSIDE THE DEVICE.

- After touching the ”RETRIEVE” button located on the main screen, the door of the device with the tray will be opened automatically. The “DOOR OPENING” message will appear on the display.
- Place the CAPRACK with caps on the extended tray.

NOTE! MAKE SURE THAT THE CAPS ARE PLACED CORRECTLY IN THE CAPRACK.

- In order to proceed with retrieving, press the ”START” button located on the display.


- The device will automatically activate the cap retrieving function.

NOTE! AFTER THE CORRECT PERFORMANCE OF THE OPERATION, THE DOOR WITH THE TRAY WILL BE OPENED AUTOMATICALLY. MAKE SURE THAT NO OBJECTS WHICH COULD LEAD TO A COLLISION ARE LOCATED BEFORE THE DEVICE.

- The cap retrieving operation is completed. The caps retrieved from the CAPRACK are inside the device.

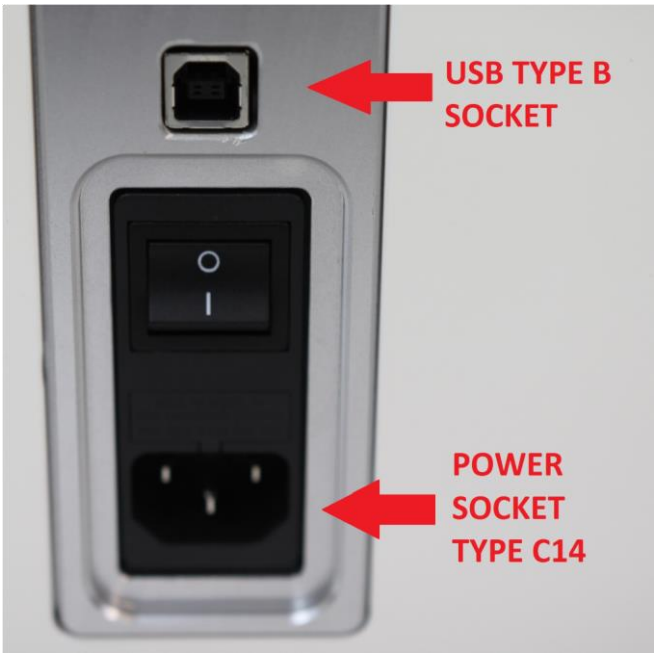
## 10.6 EXTERNAL CONTROL

Upon request of the user (integrator), the DECAPPER is prepared for connection with the external control system. The device is able to operate in a stable manner without the door located on the front panel, however, the integrator is responsible for the connection of the DECAPPER with the additional system / device for the pick-up of RACKS and CAPRACKS. In such a situation, the integrator will be responsible for the operating safety related to the newly formed compacted machine (DECAPPER + an additional system / device) and for its marketing in a manner which is compliant with the regulations applicable within a given area.

THE INTEGRATOR SHOULD, IN PARTICULAR, CONDUCT THE PROCESS OF RISK ANALYSIS WHICH COVERS THE COMPACTED MACHINE – THE DECAPPER AND THE ADDITIONAL SYSTEMS / DEVICES, WHOSE OPERATION IS INTEGRATED.

THE MANUFACTURER IS NOT LIABLE FOR ANY RISKS RELATED TO THE INTEGRATION OF THE DECAPPER WITH ADDITIONAL SYSTEMS / DEVICES, WHICH SHOULD BE MINIMISED BY THE INTEGRATOR.

- The DECAPPER is connected to the external control by means of the USB port, type B.




- Upon connection with the external device provided with operating systems like Windows 7, Windows 10 or Linux – the device driver will be installed automatically.
- The DECAPPER operates on the basis of the USB-SERIAL converter; therefore, it is necessary to verify the allocated COM port.
- RS232 communication parameters: 9600,8,n,1.
- The user (integrator) is solely obliged to install any RS232 communication software.

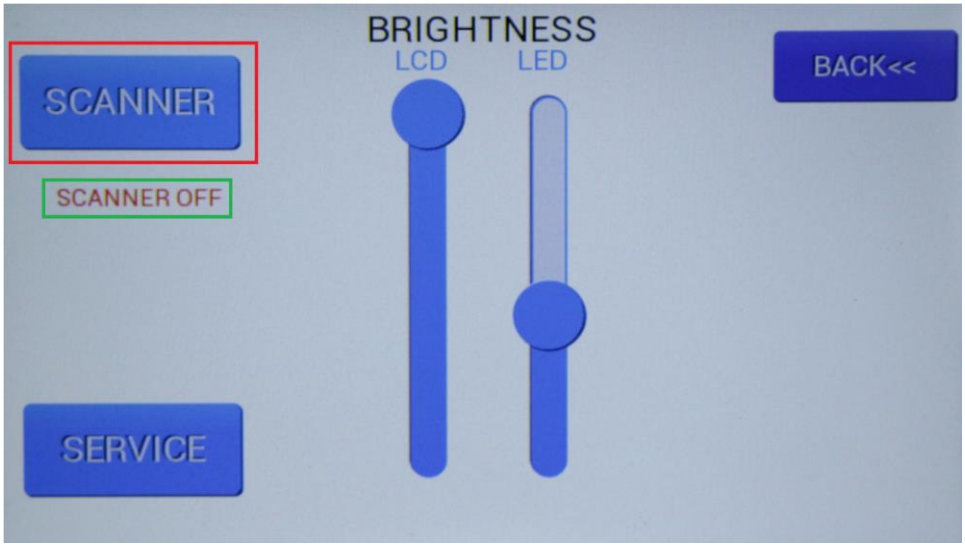
# 11. ADJUSTMENT

## 11.1 TURNING ON / OFF THE SCANNER

The DECAPPER allows the operation in two functions:

- With the scanner function turned on
- With the scanner function turned off

The scanner function allows the recognition of barcodes placed on the RACK. The selection of this parameter is available in the ”SETTINGS” section. Upon touching the ”SETTINGS” button on the main screen you will be transferred to the adjustment section.

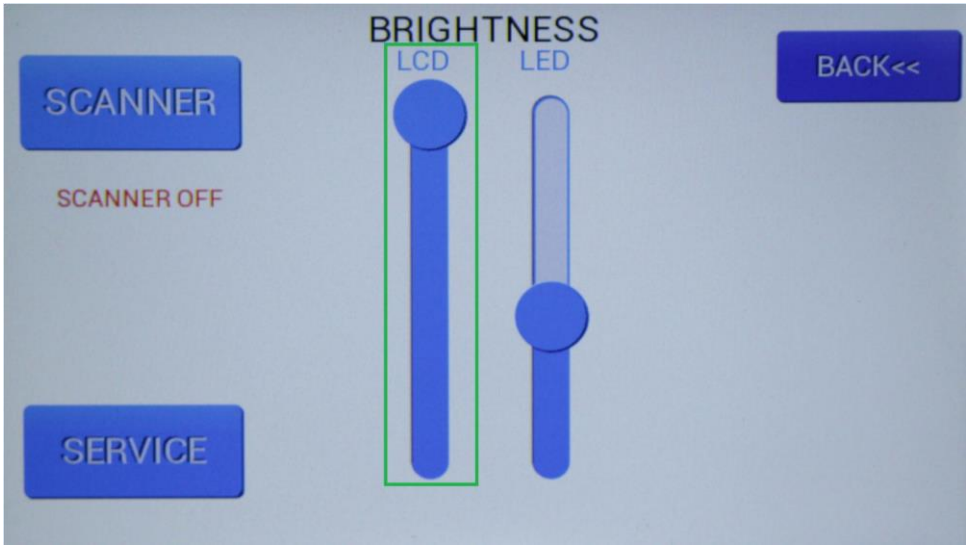



Upon touching the ”SCANNER” button (marked in red in the figure above), the scanner function will be turned on / off.

THE CURRENT SCANNER ON / OFF STATUS IS DETERMINED ON THE DISPLAY AT THE PLACE MARKED IN GREEN IN THE FIGURE ABOVE. SCANNER OFF – THE SCANNER IS TURNED OFF. SCANNER ON – THE SCANNER IS TURNED ON.

## 11.2 DISPLAY BACKLIGHT

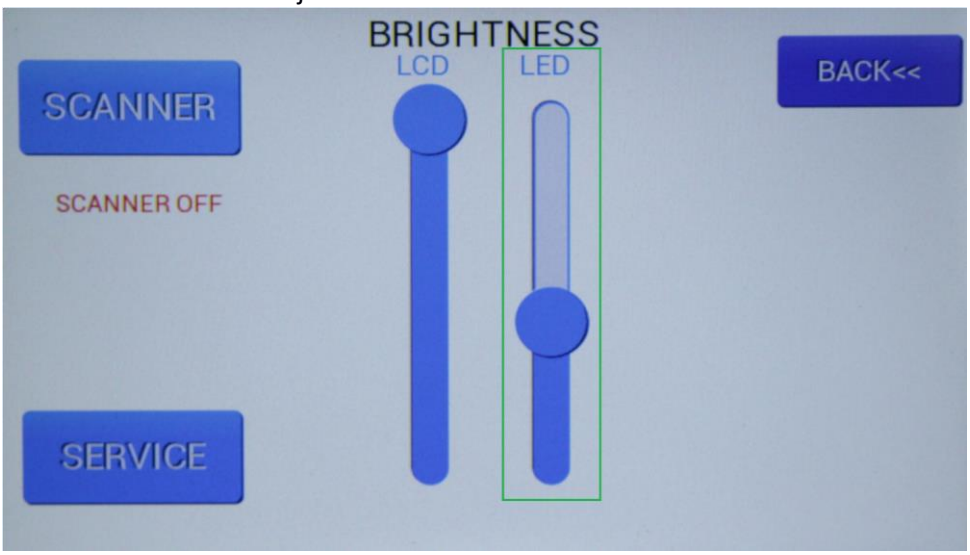
The DECAPPER allows the brightness of the installed LCD to be adjusted. The selection of this parameter is available in the “SETTINGS” section. Upon touching the ”SETTINGS” button on the main screen, you will be transferred to the adjustment section.




BY MOVING YOUR FINGER VERTICALLY IN THE LCD SECTION (MARKED IN GREEN IN THE FIGURE ABOVE), YOU WILL OBTAIN THE HIGHER OR LOWER BACKLIGHT OF YOUR LCD.

## 11.3 WORKING SPACE BACKLIGHT

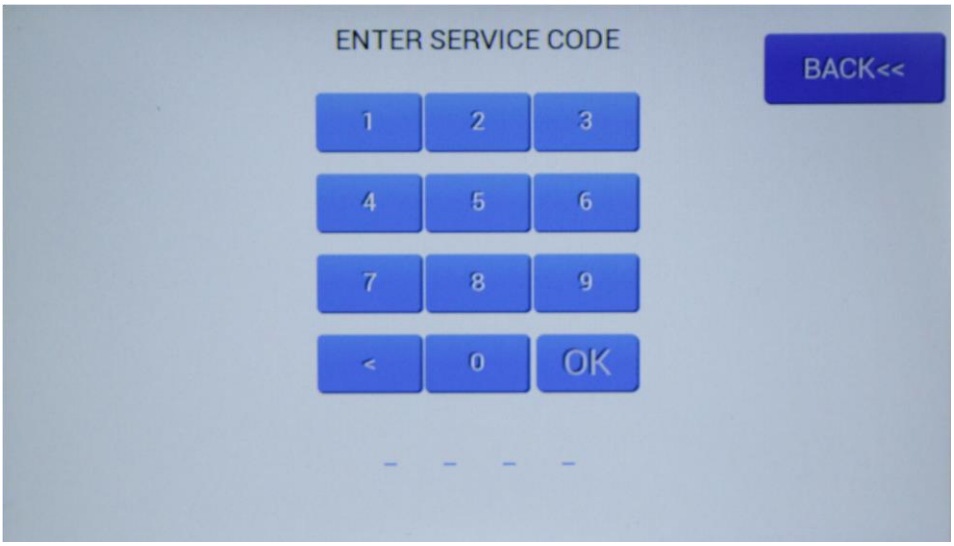
The DECAPPER allows the setting of the brightness of the working space backlight. The selection of this parameter is available in the “SETTINGS” section. Upon touching the ”SETTINGS” button on the main screen, you will be transferred to the adjustment section.




BY MOVING YOUR FINGER VERTICALLY IN THE LED SECTION (MARKED IN GREEN IN THE FIGURE ABOVE), YOU WILL OBTAIN THE HIGHER OR LOWER BACKLIGHT OF THE WORKING SPACE.

## 11.4 SERVICE MODE

The service mode is available only to the manufacturer’s personnel. The manufacturer’s service personnel will be transferred to the logging panel by touching the ”SERVICE” button located in the ”SETTINGS” section.




## 12. MAINTENANCE (CLEANING)

THE CLEANING OF THE AVAILABLE EXTERNAL AND INTERNAL PARTS IS POSSIBLE ONLY AFTER THE PRIOR DISCONNECTION OF POWER SUPPLY.

The internal parts of the device may be dry cleaned, using an anti-static material.

DURING THE CLEANING OPERATION, NO AGENTS IN SPRAY MAY BE USED.

## 13. REPAIR

In the event of any damage to the device, contact the manufacturer directly. The manufacturer's data are available in section of this instruction manual.

ANY ATTEMPT AT REPAIRING THE DEVICE ON YOUR OWN WILL RESULT IN THE TRANSFER OF RESPONSIBILITY FOR THE DEVICE TO THE ENTITY WHICH PERFORMS THE REPAIR, THE LOSS OF
VALIDITY OF THE DECLARATION OF CONFORMITY AND THE TERMINATION OF THE GUARANTEE.

## 14. TRANSPORT

The improper transport conditions may damage the device or result in the occurrence of a dangerous situation.

In order to transport the device:

- Check the condition of the transport packaging supplied by the manufacturer (bag and box)
- Place the device in the transport packaging
- Close the transport device
- Place the transport packaging with the device vertically inside a means of transport.
- If the means of transport has no sideboards/walls, the transport packaging must be secured by means of transport belts
- In order to prepare for the start-up of the device at the new place of use, follow the above-mentioned steps in the reverse order.

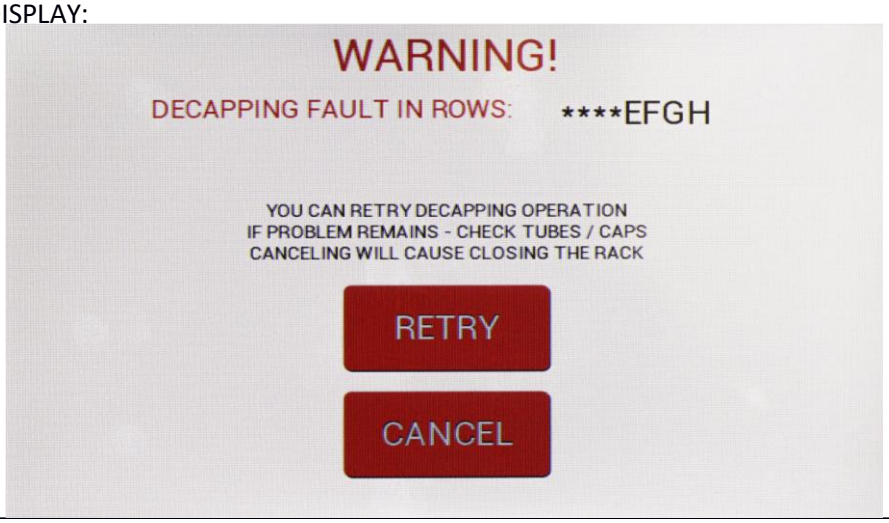
EACH TIME DURING TRANSPORT, USE THE TRANSPORT PACKAGING SUPPLIED BY THE MANUFACTURER.

## 15. PROCEDURE FOR HANDLING FAILURES

IF ANY ADVERSE EVENT IS DETECTED WHILE WORKING WITH THE DEVICE OR IF ANY ERROR MESSAGE APPEARS ON THE DISPLAY – CHECK THE TABLE BELOW TO FIND AN ANSWER.

DESCRIPTION OF THE LIKELY NON-COMPLIANCE:
**INCORRECTLY PERFORMED DECAPPING OPERATION (MAINLY SUSPENSION OF CAPS)**

MESSAGE ON THE DISPLAY:



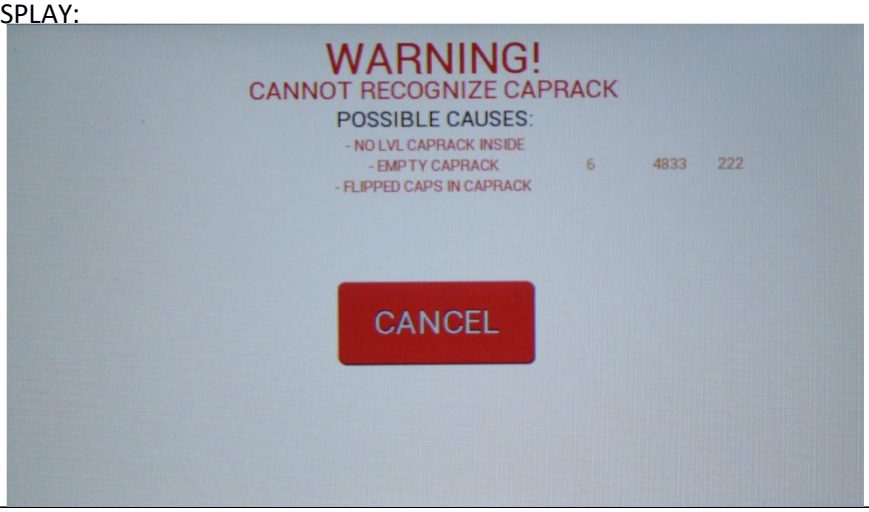

PROCEDURE:

**PRESSING THE ”RETRY” BUTTON WILL RESULT IN ANOTHER ATTEMPT AT DECAPPING.**

**IF SEVERAL ATTEMPTS AT PERFORMING THE DECAPPING OPERATION DO NOT BRING THE EXPECTED EFFECT, CANCEL THE OPERATION USING THE “CANCEL” BUTTON. PRESSING THE ”CANCEL” BUTTON WILL CAUSE THE CLOSURE OF THE RACK, AND THE DECAPPING OPERATION WILL NOT BE PERFORMED. IT IS RECOMMENDED TO CHECK THE FAULTY TUBES IN ROWS INDICATED ON THE DISPLAY (IN THE CURRENT EXAMPLE: ROWS E, F, G AND H).**

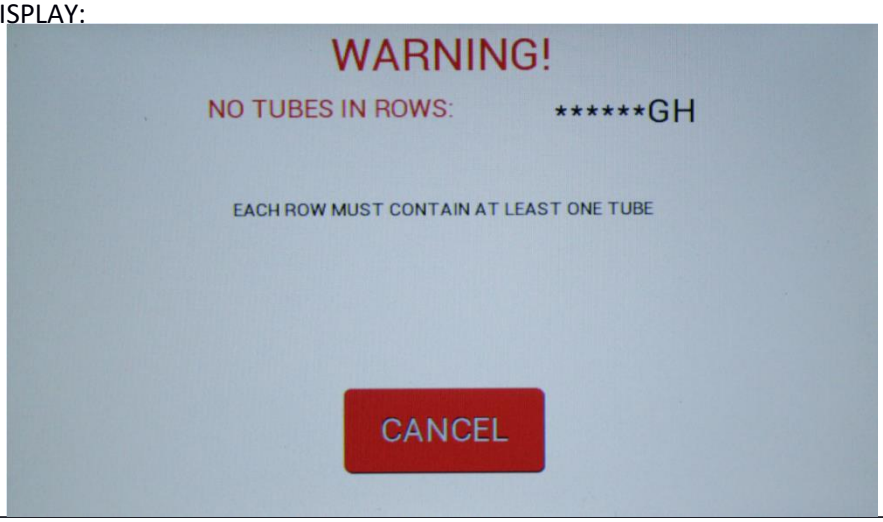
| DESCRIPTION OF THE LIKELY NON-COMPLIANCE: |
|---|

**INCORRECT CAPRACK RECOGNITION (THIS REFERS TO THE STORE FUNCTION)**

| DESCRIPTION OF THE LIKELY NON-COMPLIANCE:<br>**INCORRECT CAPRACK RECOGNITION (THIS REFERS TO THE RETRIEVE FUNCTION)** |
|---|
| MESSAGE ON THE DISPLAY:<br>  <br> |
| PROCEDURE:<br>**PRESS THE ”CANCEL” BUTTON. AFTER THE AUTOMATIC OPENING OF THE DOOR, MAKE SURE THAT THE PROPER CAPRACK WAS PLACED ON THE TRAY, IN ACCORDANCE WITH THE APPLICATION DESCRIBED IN SECTION 3 OF THIS INSTRUCTION MANUAL. AT LEAST ONE CAP MUST BE FOUND IN EACH ROW (A-H) OF THE CAPRACK. MAKE SURE THAT CAPS IN THE CAPRACK ARE ARRANGED PROPERLY.** |

DESCRIPTION OF THE LIKELY NON-COMPLIANCE:
**RACK DOES NOT CONTAIN AT LEAST ONE TUBE IN EACH ROW**

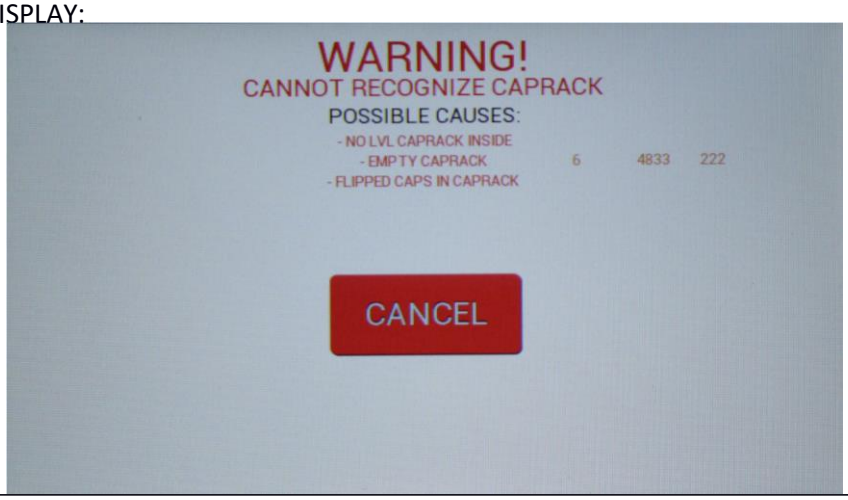
MESSAGE ON THE DISPLAY:




PROCEDURE:
**PRESS THE ”CANCEL” BUTTON. AFTER THE AUTOMATIC OPENING OF THE DOOR, MAKE SURE THAT EACH ROW CONTAINS AT LEAST ONE TUBE**

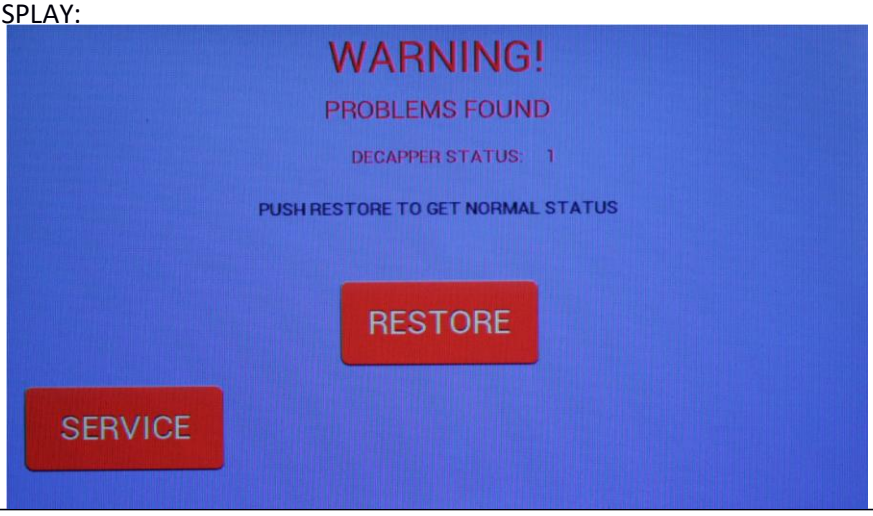
DESCRIPTION OF THE LIKELY NON-COMPLIANCE:
**INCORRECT CAPRACK RECOGNITION (THIS REFERS TO THE RETRIEVE FUNCTION)**

MESSAGE ON THE DISPLAY:




PROCEDURE:
**PRESS THE ”CANCEL” BUTTON. AFTER THE AUTOMATIC OPENING OF THE DOOR, MAKE SURE THAT THE PROPER CAPRACK WAS PLACED ON THE TRAY, IN ACCORDANCE WITH THE APPLICATION DESCRIBED IN SECTION 3 OF THIS INSTRUCTION MANUAL. AT LEAST ONE CAP MUST BE FOUND IN EACH ROW (A-H) OF THE CAPRACK. MAKE SURE THAT CAPS IN THE CAPRACK ARE ARRANGED PROPERLY.**

| DESCRIPTION OF THE LIKELY NON-COMPLIANCE:<br>**COLLISION** |
| --- |
| MESSAGE ON THE DISPLAY:<br>  <br> |
| PROCEDURE:<br>**PRESSING THE ”DIAGNOSE” BUTTON WILL DISPLAY DECAPPER ACTUAL STATUS** |

| MESSAGE ON THE DISPLAY:<br>  <br> |
| --- |
| PROCEDURE:<br>**PRESSING THE ”RESTORE” BUTTON WILL RESULT IN AN ATTEMPT AT AUTOMATIC SOLUTION OF THE PROBLEMS. IN CERTAIN CASES, THE INTERVENTION OF THE USER MAY BE REQUIRED – THEN IT IS NECESSARY TO TAKE ACTIONS IN ACCORDANCE WITH THE INFORMATION DISPLAYED ON THE LCD.**<br><br>**IF THE MESSAGE APPEARS AGAIN, CONTACT THE MANUFACTURER.** |

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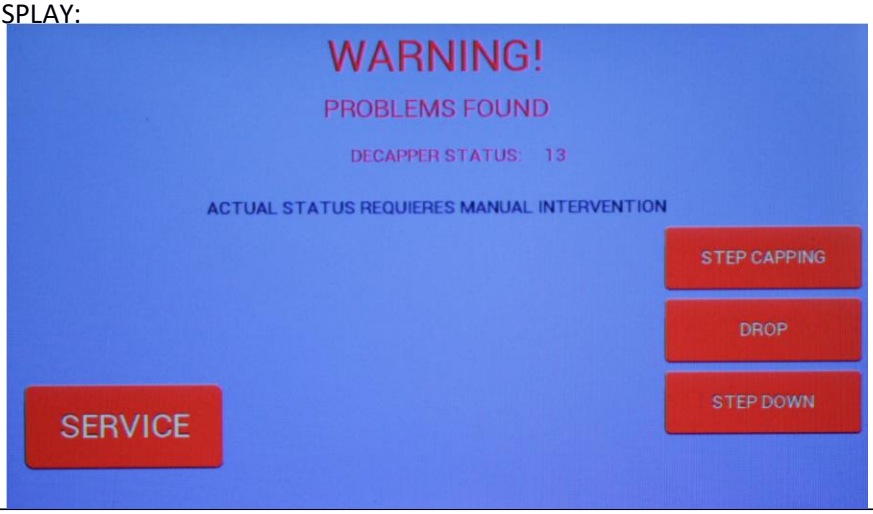
|---|
| MESSAGE ON THE DISPLAY:<br>  <br> |
| PROCEDURE:<br>**IT IS NECESSARY TO TAKE ACTIONS IN ACCORDANCE WITH THE INFORMATION DISPLAYED ON THE LCD. PUSHING "STEP CAPPING" WILL CAUSE A CAPPING STEP MOTION, PUSHING "STEP DOWN" WILL CAUSE LIFT DOWN STEP MOTION, PUSHING "DROP" WILL CAUSE DROPPING OF THE CAPS.** |

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| DESCRIPTION OF THE LIKELY NON-COMPLIANCE:<br>**A HANDLED ELEMENT (CAP, TUBE, RACK, CAPRACK) IS OUTSIDE ITS INTENDED LOCATION (AT A GIVEN PROCESS STAGE).** |
| MESSAGE ON THE DISPLAY:<br>**NONE** |
| PROCEDURE:<br>**DISCONNECTION OF THE DEVICE FROM POWER SUPPLY, REMOVAL OF THE ELEMENT.** |

## DISMANTLING AND DISPOSAL OF THE DEVICE

At the end of the useful life of the device, it must be disposed of in an appropriate manner. The device consists of metal, polymer and electrical elements. The following procedure must be considered obligatory at the end of the device's useful life:

1) Disassembly of all machine elements.

2) Segregation of the respective components.

3) All waste should be delivered to organisations which deal specificallywith disposal of waste and which have the relevant permits for its collection and further processing.

4) After the disposal, it is necessary to obtain the "waste transfer note",which confirms the disposal of components in accordance with the provisions of law.

The disposal of electric and electronic waste is strictly prohibited. We would hereby like to inform you that the main purpose of European regulations and the Waste Electric and Electronic equipment Act of 11 September 2015 is to reduce the amount of waste from equipment, ensure the appropriate level of collection, recovery and recycling of the waste equipment and increase the social awareness regarding its harmfulness to the natural environment at each stage of its use.

REMEMBER THAT THE PROPER DISPOSAL OF EQUIPMENT ALLOWS THE PRESERVATION OF PRECIOUS RESOURCES AND AVOIDANCE OF THE NEGATIVE IMPACT ON HEALTH AND ENVIRONMENT, WHICH MAY BE AT RISK DUE TO THE INAPPROPRIATE HANDLING OF WASTE AND HAZARDOUS COMPONENTS.

## SPECIFICATION OF SPARE PARTS

The manufacturer does not provide for any spare parts for the DECAPPER. Situations related to repairs / replacements of subassemblies are described in chapter 13 – REPAIR.

## EMISSION

### NOISE

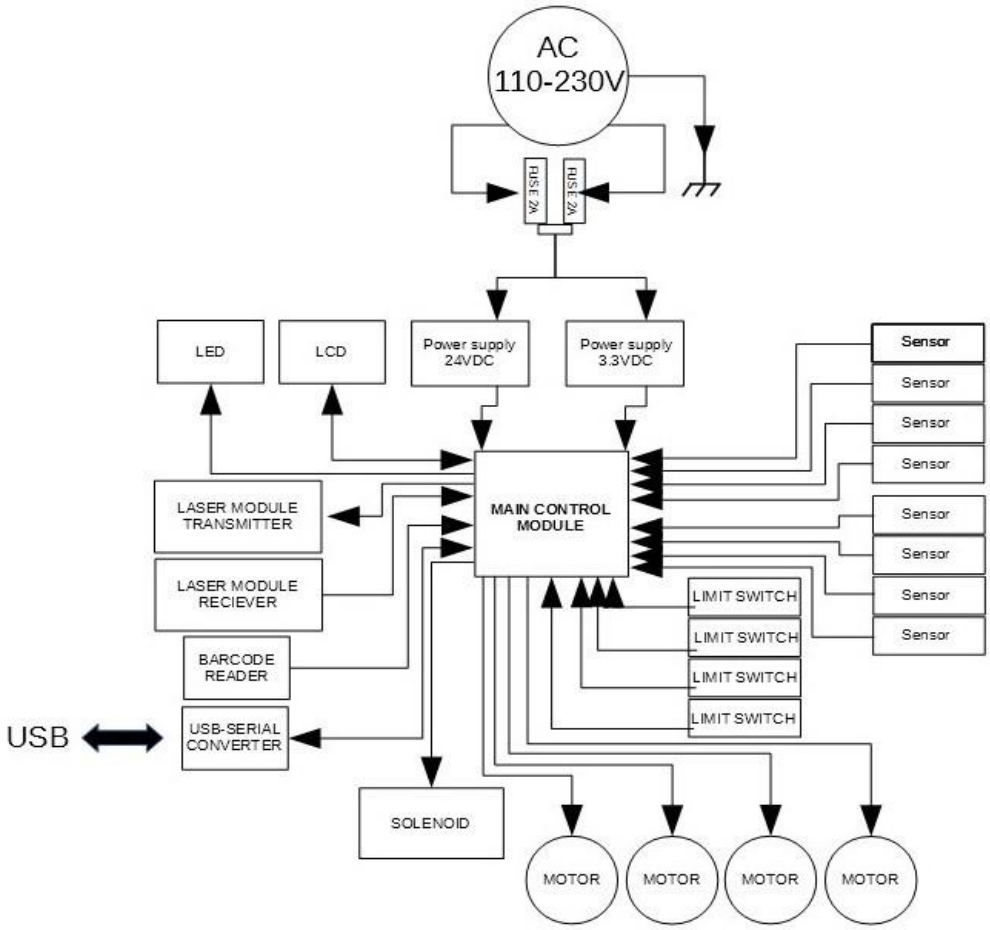
The device does not create any risks related to the emission of annoying noise. The results of tests performed at the manufacturer of the device have demonstrated that:

- The A-weighted emission sound pressure level at workstations is 70.8 dB (A).
- The peak C-weighted instantaneous sound pressure value at the workstation is 70.9 dB (C)

### RADIATION

The devices are designed in accordance with the requirements of the Electromagnetic Compatibility Directive (EMC) 2014/30/EU. The manufacturer declares that the devices do not generate any harmful electromagnetic interference and that the devices per se are resistant to such interference caused by the equipment operating in its immediate vicinity.

## WIRING DIAGRAM



# DECLARATION OF CONFORMITY OF THE DEVICE

THE END