INSTRUCTION FOR USE

nestor



DOMINIQUE DUTSCHER SAS

Cellaven

Version 1.0

DOMINIQUE DUTSCHER SAS

CONTENTS

Manual Version 5
Warranty and support 1
Manufacturer 1
Identification 1
Storage and Handling 1
Product intended use 2
Regulatory requirements 2
Introducing Nestor 3
Safety Instructions 4
Graphic symbols relating to the Nestor instrument 4
Waste management 4
Saftey instructions 5
Description 6
Technical specifications 6
Nestor 6
Fridge Unit 6
Connectivity hub 6
Power Supply Unit 7
View of each side 8
Nestor 8
Component & Consomables 10
Component Overview 10
Consomable Overview 10
Fluidic kit 10
Layout Options 10
Procedures 11
Unboxing 11
Nestor 11
Electrical connection 12
Start & Stop 14
Powering-up 14
Switch off 16
Initialisation de Nestor 18
Installation du Vacuum Tube 18
Setting date and time 19

DOMINIQUE DUTSCHER SAS

Tubing set 21
Tubing set installation 21
Tubing set Removal 40
Connections & Disconnection Source 54
Adapter connection 54
Connection Source 56
Temporary Disconnection Source 63
Reconnection Source 68
Permanent Disconnection Source 76
Connection & Disconnection Target 81
Connection Target 81
Temporary disconnection target 91
Reconnection target 97
Permanent disconnection target 102
Connection & Disconnection Collection 107
Adapter connection 107
Connection Collection 109
Temporary disconnection collection 116
Reconnection Collection 121
Permanent disconnection collection 128
Protocols 133
Create protocol 133
New protocole 133
Loops 134
Steps 138
Verify your protocol 145
Export your potocol 145
Import protocol 146
Launch a protocol 148
Terminate protocol 152
Protocol completed 154
Update 155
Main Board 155
Nestor App 157
User Interface 158
Troubleshooting 160
Overflow of the Discard Bottle 160

DOMINIQUE DUTSCHER SAS

RFID issue 160
Nestor LED indicators 160
System LED Indicator 160
Protocols LED 161
Cooling Unir LED 161
Fridge Unit LED indicators 161
System LED indicator 161
Cooling LED indicator 161
LED Combinations 162
Power Hub LED indicators 162

DOMINIQUE DUTSCHER SAS

MANUAL VERSION

Revision date	Author	Updates
11/14/2025	LAF	Creation of the initial document

DOMINIQUE DUTSCHER SAS

WARRANTY AND SUPPORT

The use of this instrument is restricted to personnel who have received appropriate training in in-vitro cell culture techniques within an R&D environment.

Cellaven accepts no responsibility:

- for any unauthorized modifications or interventions on Nestor System (whether intentional or unintentional),
- for any damage occurring during the use of the software, including loss of data or any financial loss that may result from the use of the Nestor system,
- for any failure to follow the instructions provided in this manual,
- for any use other than the intended purpose.

The warranty applies exclusively to the use of the Nestor System as described in this manual, for a period of two years. All warranty claims, after-sales service requests, or technical support inquiries must be addressed to the authorized distributor, who is the customer's primary point of contact.

Cellaven reserves the right to assess and determine the appropriate corrective action in the event of a malfunction or anomaly.

The Nestor system is deemed accepted without reservation by the customer upon signing the delivery note, unless otherwise stated on the document.

⚠ Following clinical and performance evaluation campaigns confirming culture quality and compliance, all consumables are certified as single use. Cellaven accepts no responsibility in the event of their reuse.

MANUFACTURER

CELLAVEN

3A Les Coulots, 21110 Bretenière France

IDENTIFICATION

Instrument name: Nestor System

STORAGE AND HANDLING

If the instrument will not be used for an extended period (longer than one month), it must be stored in a dry, room-temperature environment, as specified on the instrument's identification label.

The battery must be disconnected by flipping the white switch at the back of the Nestor unit before any long-term storage.

The instrument should be protected from dust during storage, for example by using a clean cover or appropriate protective packaging.

DOMINIQUE DUTSCHER SAS

All handling of the instrument must be carried out with care to avoid mechanical, electronic, or operational damage.

PRODUCT INTENDED USE

Nestor is an instrument intended exclusively for cell culture applications in Research and Development. It is not designed, certified, or approved for any medical, diagnostic, or therapeutic use.

REGULATORY REQUIREMENTS

Nestor carries the electromagnetic CE marking, certifying its conformity with all applicable directives and regulations listed above. The EU Declaration of Conformity is available upon request from Cellaven or your authorized distributor.

DOMINIQUE DUTSCHER SAS

INTRODUCING NESTOR

The Cellaven team thanks you for trusting Nestor to take care of your cell cultures.

Nestor optimizes the process of culture medium renewal by minimizing human intervention, thereby reducing contamination risks and standardizing experimental protocols.

This user manual will guide you through the installation and operation of Nestor.

Nestor manages your flask and plate cultures, called targets, through ten independent fluidic lines These targets are supplied by Nestor from source bottles stored in the Refrigeration Unit. The targets are then emptied into the collection bottles.

DOMINIQUE DUTSCHER SAS

SAFETY INSTRUCTIONS

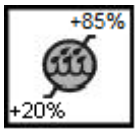
GRAPHIC SYMBOLS RELATING TO THE NESTOR INSTRUMENT



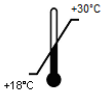
Static-sensitive equipment – handling precautions required.



Biological hazards, ISO 7000-0659 standards



Hygrometric limits for use.



Operating temperature limits.



Consult the user manual.



European Conformity.



Recycling of the instrument by returning it to the distributor.

WASTE MANAGEMENT

Electrical and electronic equipment

Nestor must not be disposed of with household waste. In accordance with the WEEE Directive 2012/19/EU, this device must be collected separately and returned to an authorized recycling facility or to your Cellaven distributor.

Consumables

All consumables supplied with Nestor (tubing set, connectors, adapters, caps, etc.) are single-use. After use with biological materials, they must be disposed of according to your laboratory's biohazard waste procedures. Cellaven declines all responsibility in case of reuse.

DOMINIQUE DUTSCHER SAS

Liquid waste

Discard bottle may contain biological residues. Their contents must be disposed of in accordance with the biohazard waste regulations applicable in your institution.

Battery disposal

Nestor contains an internal battery. Do not dispose of batteries with household waste. Return them to an approved collection point in accordance with Directive 2006/66/EC.

Prohibited actions

- Do not incinerate the device or its battery.
- Do not dispose of liquid waste in sinks or regular waste streams.
- Do not attempt to dismantle the device for disposal.

SAFTEY INSTRUCTIONS

This section outlines the essential safety rules to ensure user protection and to prevent improper handling of the Nestor instrument.

- Never install any software or update other than those provided directly by Cellaven or downloaded from the official Cellaven website.
- Use Nestor exclusively for the applications described in this manual. Any use outside the defined scope is strictly prohibited.
- Use only the dedicated consumables kit (Tubing Set, Adapter Plate, Adapter Flask).
- Do not connect any USB cables to Nestor's USB port for charging external devices.
- Do not use any spare parts, accessories, or consumables other than those provided or validated by Cellaven.
- During handling or transport, never move the instrument with the covers open.
- Do not place any objects on top of the instrument if their total weight exceeds 12 kg.
- Do not expose Nestor to any heat source above 40 °C, or to extreme temperature variations.

Electrical Safety

- Before plugging in the device, make sure the power cable is neither damaged nor twisted.
- Never handle electrical connections with wet hands.
- Use a properly grounded electrical outlet.

Important: The customer must ensure that the electrical installation is properly protected against grounding. faults. The instrument must be connected to a power supply network with an appropriate earth connection, using only the power cord provided.

DOMINIQUE DUTSCHER SAS

DESCRIPTION

TECHNICAL SPECIFICATIONS

NESTOR

PHYSICAL CHARACTERISTICS

- Length x Width x Height : 290 X 292 X 230 mm
- Weight : 12.5 kg

ENVIRONMENTAL OPERATING CONDITIONS

- Relative humidity : 20–85%
- Temperature : +18 °C to +30 °C

ELECTRICAL CHARACTERISTICS

- Voltage : 24 V~
- Frequency : 47–53 Hz
- Compliance : CE / UL
- Power consumption :

RFID

The RFID reader integrated into Nestor uses HF (High Frequency) technology compliant with the ISO/IEC 15693 and ISO/IEC 14443 standards.

- Operating frequency: 13.56 MHz
- Modulation type: ASK (Amplitude Shift Keying)

FRIDGE UNIT

ELECTRICAL CHARACTERISTICS

- Voltage : 24 V~
- Frequency :
- Compliance : CE / UL
- Power consumption :

CONNECTIVITY HUB

PHYSICAL CHARACTERISTICS

- Length x Width x Height : 195 X 133 X 65 mm without any cable
- Weight : 1.14 kg without any cable

ENVIRONMENTAL OPERATING CONDITIONS

DOMINIQUE DUTSCHER SAS

- Relative humidity :
- Temperature : +18 °C to +30 °C

POWER SUPPLY UNIT

PHYSICAL CHARACTERISTICS

- Length x Width x Height : 320 X 103 X 60 mm without any cable
- Weight : 1.49 kg without any cable

DOMINIQUE DUTSCHER SAS

VIEW OF EACH SIDE

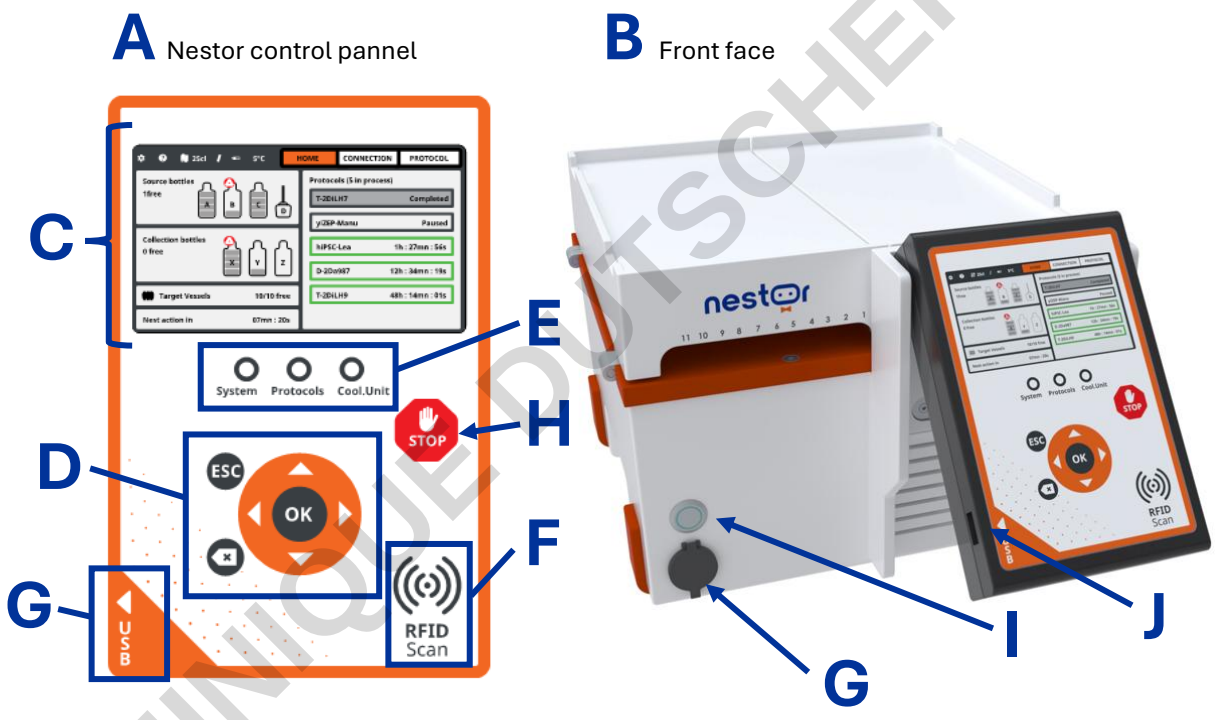
NESTOR

FRONT SIDE

Nestor is operated via the Control Panel (A) located on the right side of the front interface (B). The panel is fully tiltable up to 90°. It features a touchscreen display (C) providing access to the control software. In the event of a touchscreen failure, navigation can also be performed using the mechanical front buttons (D).

Below the display, a set of status LEDs (E) provides system, protocol, and refrigeration unit indicators.

At the bottom of the panel, the RFID scanning area (F) is positioned on the right side, while the USB Input Port (G) is located on the left side.



C : Toutch screen
D : Mechanical buttons
E : Signalisation LED
F : RFID scan

G : General USB port
H : Stop button
I : ON button

J : Input USB port

DOMINIQUE DUTSCHER SAS

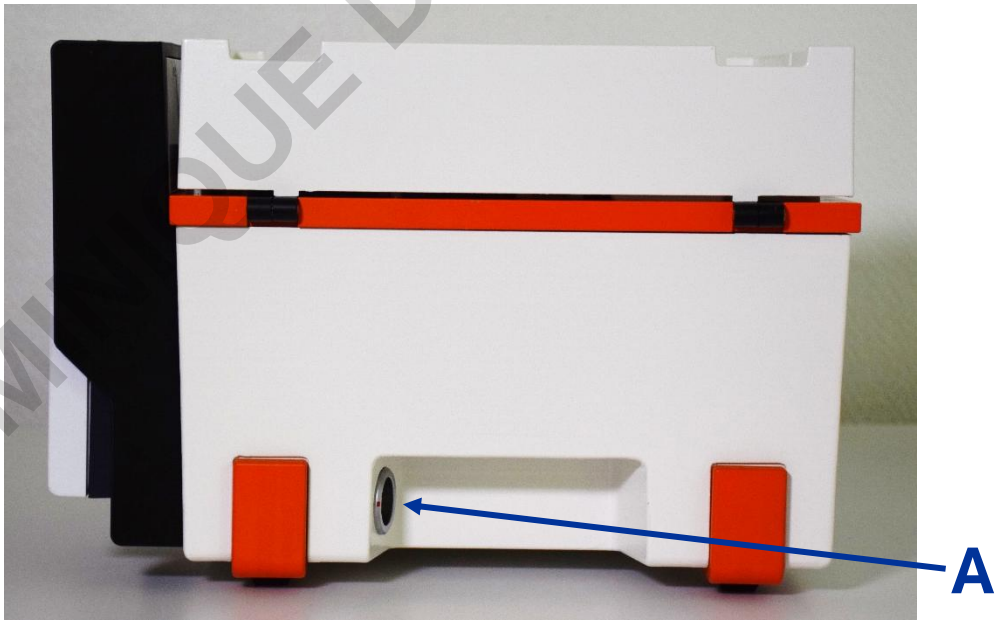
REAR SIDE



A : Battery Switch

B : Vaccum nozzle

RIGHT SIDE



A : Power supply socket

DOMINIQUE DUTSCHER SAS

COMPONENT & CONSOMABLES

COMPONENT OVERVIEW

The system is equipped with a Power Supply Unit that ensures electrical compatibility with the standards of various countries. It is connected to a Connectivity Hub, which distributes power to both Nestor and the Refrigeration Unit simultaneously.

CONSOMABLE OVERVIEW

FLUIDIC KIT

TUBING SET

The tubing set forms the core fluidic system of Nestor.

It enables liquid transfer between the source bottles, the target vessels, and the collection bottles, and is essential for proper device operation.

Thanks to its sterile, closed-system connectors, the tubing set can be handled outside a biosafety cabinet without compromising sterility or introducing contamination risks.

ADAPTATORS

Before connecting any peripheral device, you must first install the corresponding sterile adapters. To determine compatibility between adapters and your laboratoryware, please refer to the document Nestor Vessel Adapters Compatibility List.

LAYOUT OPTIONS

The installation of Nestor must be optimized to ensure efficient and ergonomic use within the laboratory. It is essential to position the device no more than 1 meter away from the incubator, so that flasks and plates can remain inside during media feeding steps. The protective sleeves around the fluidic lines allow the incubator door to close without pinching the tubing, ensuring proper operation and preventing CO_2 leakage.

Nestor can be placed directly on top of the incubator, on a laboratory bench, or on the floor, depending on the laboratory layout. It can be stacked on top of the Refrigeration Unit, but the reverse configuration is not permitted.

Both Nestor and the Refrigeration Unit occupy a footprint equivalent to an A3 sheet of paper. For proper operation, each unit must be installed near an electrical outlet.

DOMINIQUE DUTSCHER SAS

PROCEDURES

UNBOXING

NESTOR

1. Open Nestor's shipping box.
2. Remove the protective polystyrene insert that holds the tablet and the USB drive in place.
3. Remove the polystyrene protective insert positioned on top of Nestor.
4. Remove the glass Discard bottle from its assigned holder.
5. Remove the accessories carton from the packaging.
6. Remove the accessories pouch from the packaging.
7. Remove the polystyrene protective insert surrounding the upper section of Nestor.
8. Remove Nestor from the box.

   Lift the device by the side handles located on each side.

   Place Nestor on a flat, stable, and clean surface, at a maximum distance of 1 meter from the incubator door where your cultures will be stored.

Please dispose of all packaging materials in the appropriate recycling containers.

DOMINIQUE DUTSCHER SAS

ELECTRICAL CONNECTION

1. Connect the power supply cable to the Power Supply Unit.

2. Take the power cable connected to the Power Supply Unit and connect it to the Connectivity Hub socket located near the green on/off switch.

   The cable plug has a red indicator that must be aligned with the red mark on the socket.

   Ensure you hear a ‘click’ as the cable is inserted to confirm it is securely connected.

3. Take the cable marked with a blue dot and plug it into the Connectivity Hub socket marked with a blue dot.

   The cable plug has a red indicator that must be aligned with the red mark on the socket.

   Ensure you hear a ‘click’ as the cable is inserted to confirm it is securely connected.

4. Plug the other end of the cable into the Nestor dispensing unit power socket, located on the right side of the device.

   The cable plug has a red indicator that must be aligned with the red mark on the socket.

   Ensure you hear a ‘click’ as the cable is inserted to confirm it is securely connected.

DOMINIQUE DUTSCHER SAS

5. Take the cable marked with an orange dot and plug into the Connectivity Hub socket marked with an orange dot

   The cable plug has a red indicator that must be aligned with the red mark on the socket.

   Ensure you hear a ‘click’ as the cable is inserted to confirm it is securely connected.

6. Plug the other end of the cable into the Fridge unit socket located at the rear of the appliance.

   The cable plug has a red indicator that must be aligned with the red mark on the socket.

   Ensure you hear a ‘click’ as the cable is inserted to confirm it is securely connected.

7. Plug the Power Supply Unit's power cable into a mains socket.

The Connectivity Hub is magnetic, so you can attach it to any metal surface. You can also attach it to any other surface using the mounting accessories provided.

DOMINIQUE DUTSCHER SAS

POWERING-UP



1. Flip the green Connectivity Hub switch to On.

2. The Fridge Unit will start up instantly. You will hear the sound of its fans.

   At startup, the System LED and the Cooling LED will turn white for 2 seconds, then switch off for 5 seconds. After this sequence, the System LED will turn green and the Cooling LED will turn blue.

   The Fridge Unit will gradually cool down to 4 degrees Celsius.



3. Flip the white backup battery switch, located on the back of Nestor to “ON”.

   Please wait 5 seconds for the system to initialize.

DOMINIQUE DUTSCHER SAS



4. Press the power button on the front, left side of Nestor until the Control Panel screen lights up.



5. The Nestor App will automatically launch on the control panel screen.

   Click on the on the “Hello” icon to access the software.

As long as no tubing set is installed, only the Home, Settings, and Tubing Set menus are accessible.
For the tubing set installation procedure, please refer to the section « Tubing set installation».

DOMINIQUE DUTSCHER SAS

SWITCH OFF

NESTOR



1. Press the power button on the front, left side of Nestor until the Control Panel screen lights off.

FRIDGE UNIT



1. Flip the green Connectivity Hub switch to Off.

ℹ This procedure will shut down all devices connected to the Connectivity Hub, including Nestor and the Refrigeration Unit.

CONNECTIVITY HUB

DOMINIQUE OUTSCHER SAS

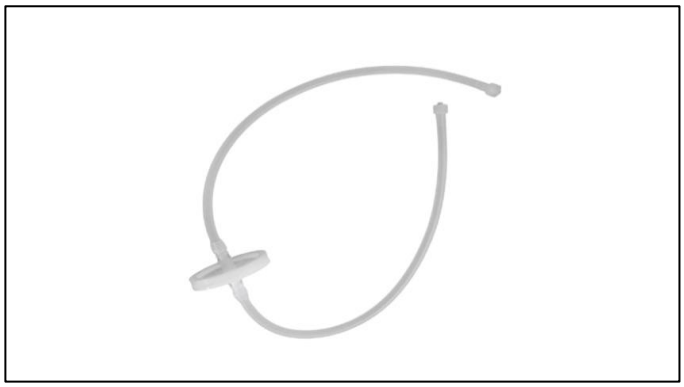


2. Flip the green Connectivity Hub switch to Off.

ℹ This procedure will shut down all devices connected to the Connectivity Hub, including Nestor and the Refrigeration Unit.

DOMINIQUE DUTSCHER SAS

INSTALLATION DU VACUUM TUBE



1. Take the Vacuum Tube out of its protective pouch.

   You can carry out this procedure outside your sterile hood.

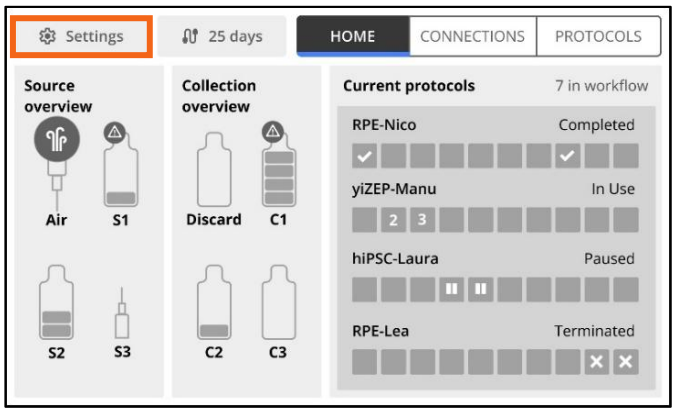


2. Screw the tip of the Vacuum tube onto the back of Nestor.

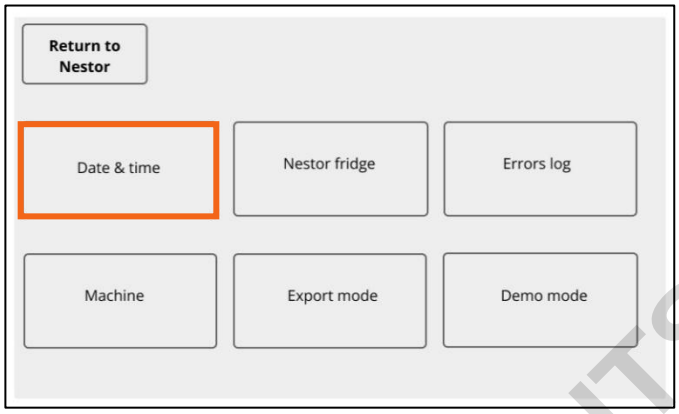


DOMINIQUE DUTSCHER SAS

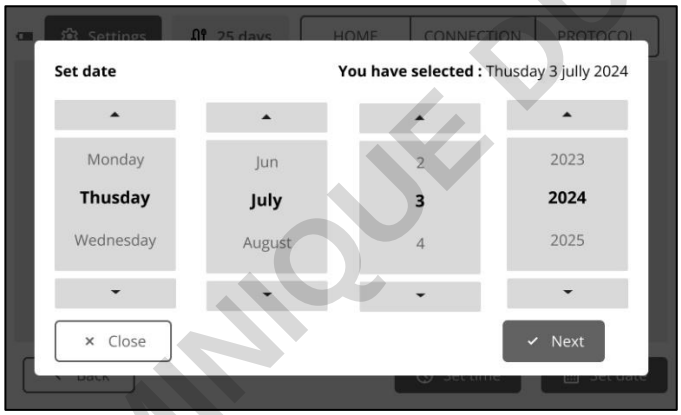
SETTING DATE AND TIME



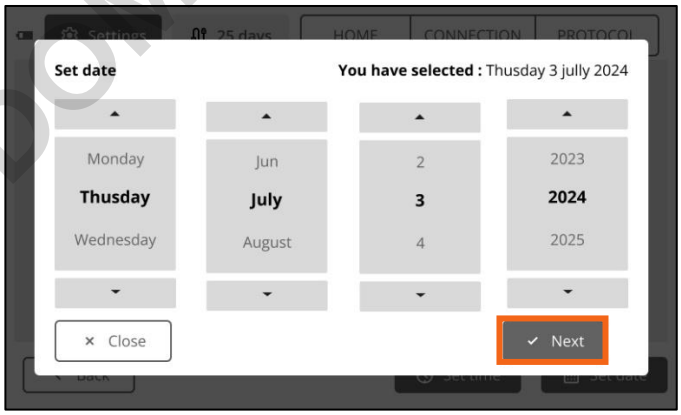
1. Click on the ‘Settings’ tab.



2. Click on the ‘Dates & time’ button.

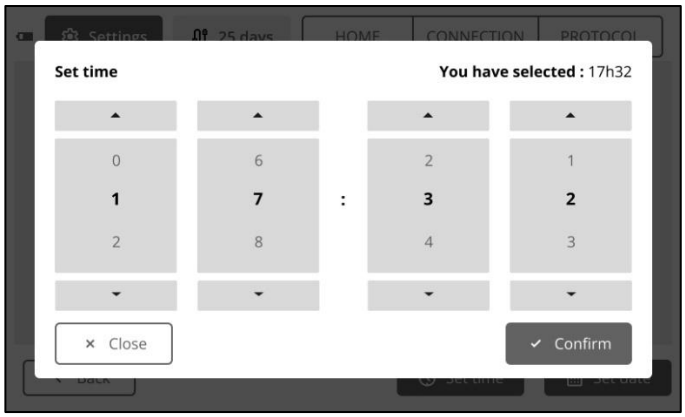


3. Use the dials to set the day and date.

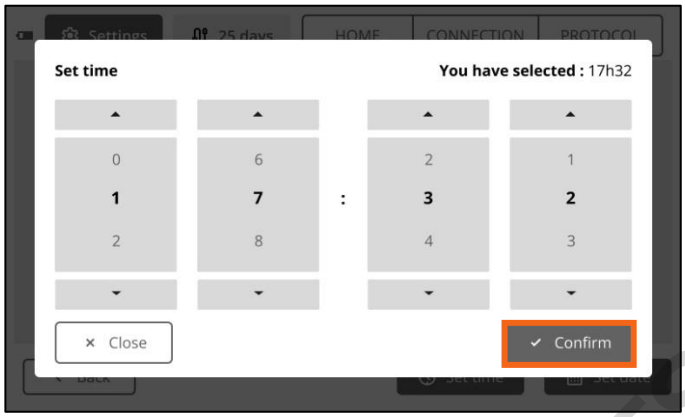


4. Click on the ‘Next’ button.

DOMINIQUE DUTSCHER SAS



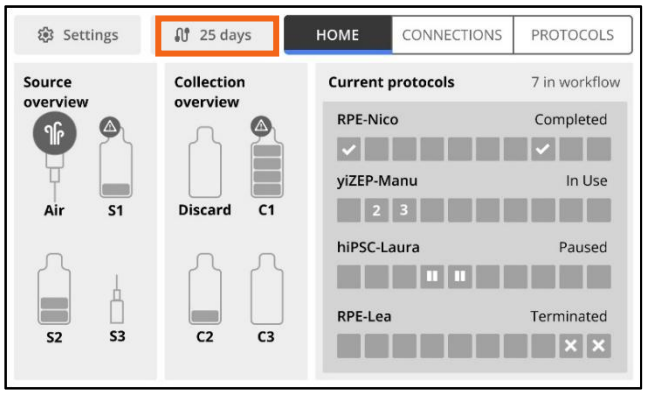
5. Use the dials to set the hour and minutes.



6. Click on the ‘Confirm’ button to complete the procedure.

DOMINIQUE DUTSCHER SAS

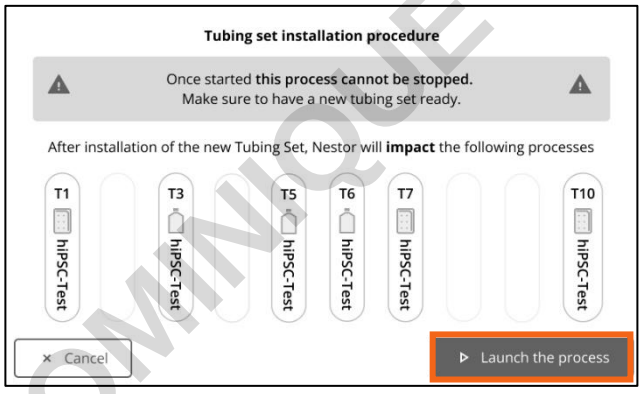
TUBING SET INSTALLATION



1. Click on the Tubing Set icon located on the menu bar on of the control panel screen.



2. Click on the “Install new Tubing Set” button.



3. Nestor will show you the vessel targets that will be impacted by this procedure.

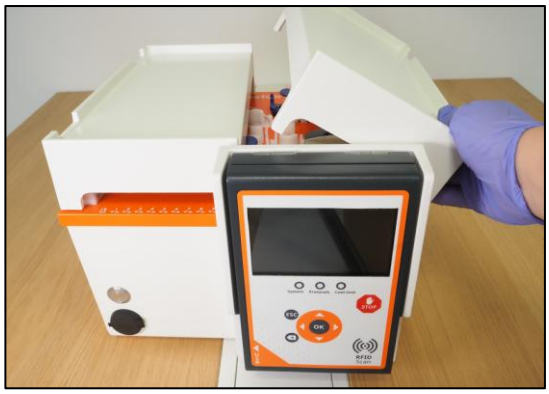
⚠ Caution: Once started, this operation cannot be cancelled. Make sure you have approximately 15 minutes and the necessary equipment:

- a new Tubing Set
- the tweezers provided

Click on the “Launch the process” icon.

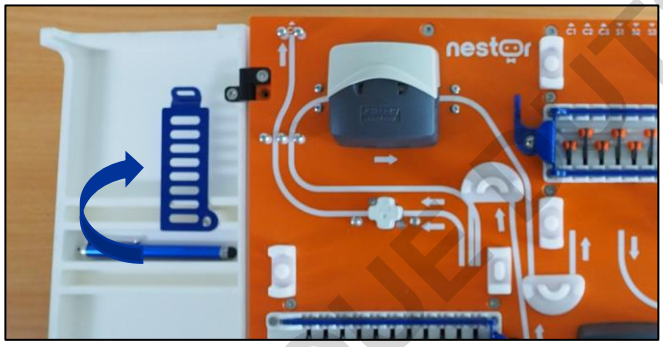
The protocols running on these channels will be paused during the procedure and will resume once the new tubing set has been installed.

DOMINIQUE DUTSCHER SAS

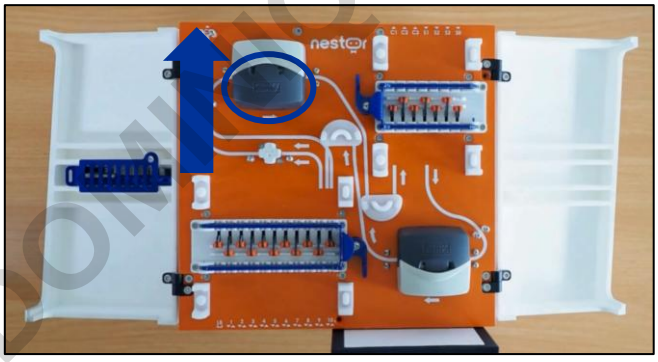




4. Open Nestor's Hinged Cover by tilting each half outward.

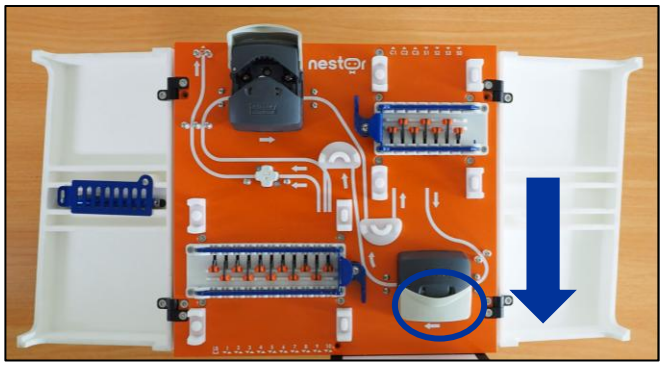


5. Open the compartment on the left side of the Hinged Cover by flipping the tab, then remove the tweezers.



6. Open the Collecting Pump by flipping the cover forward.

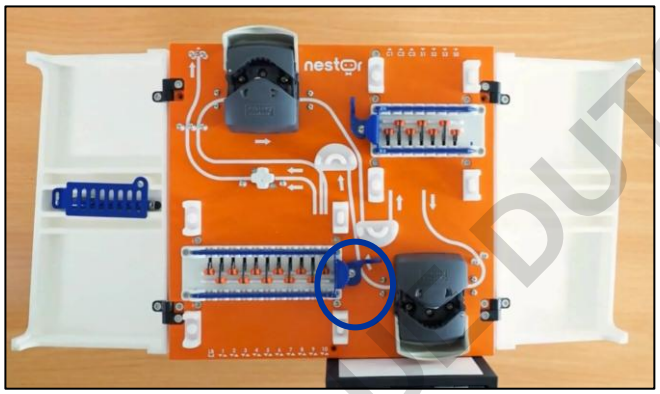
DOMINIQUE DUTSCHER SAS

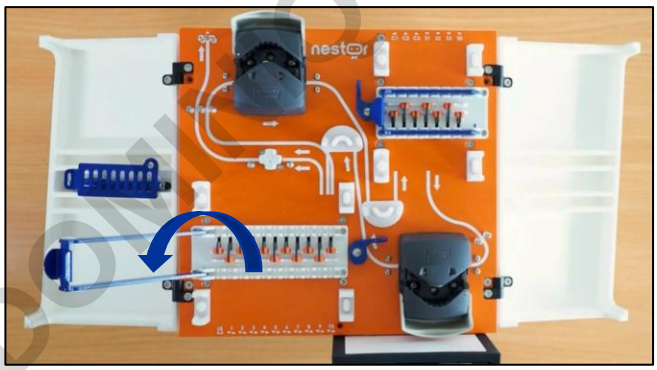


7. Open the Feed Pump by flipping the cover backward.



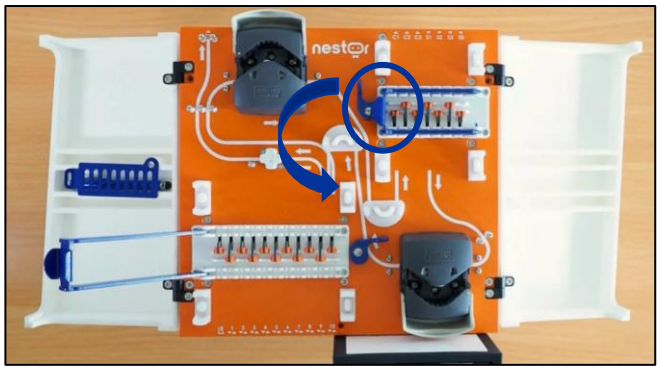
8. Flip upward the tab of the Vessel Switcher Flap to unlock it.



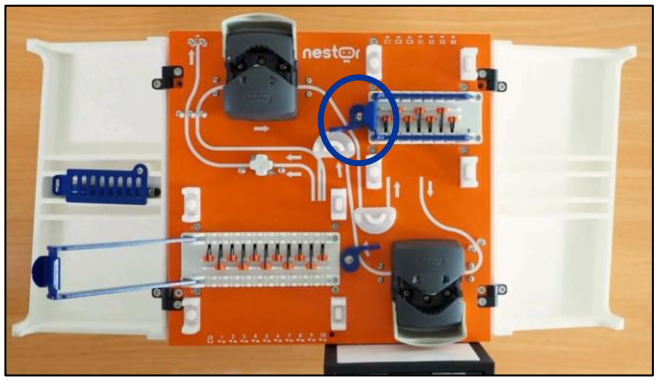


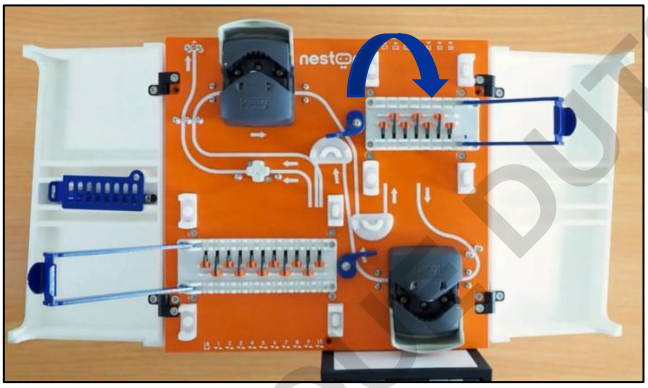
9. Lift the Vessel Switcher Flap upward to open it.

DO NOT COPY DUTSCHER SAS

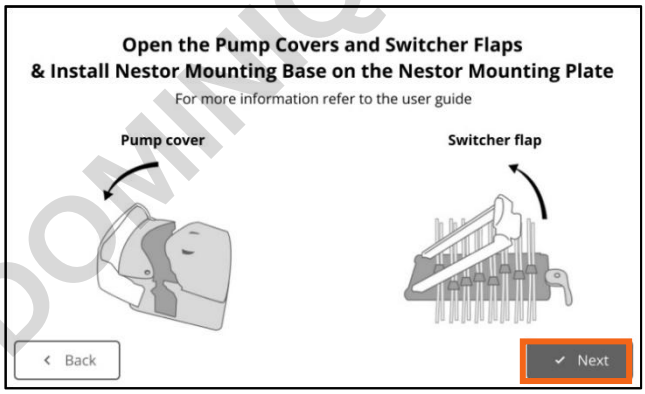


10. Flip downward the tab of the Bottle Switcher Flap to unlock it.



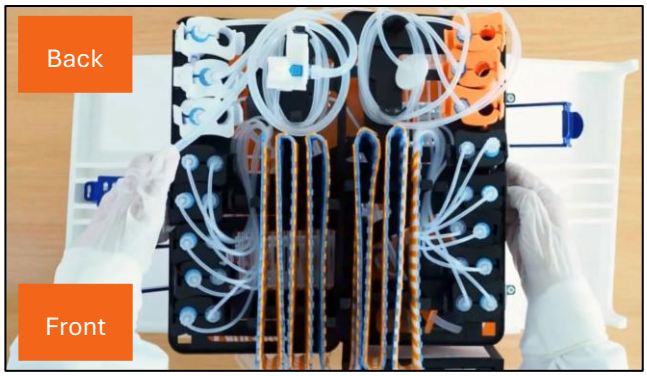


11. Lift the Bottle Switcher Flap upward to open it.



12. Click on the “Next” button.

DOMINIQUE DUTSCHER SAS



13. Place the Tubing Set mounting Plate on the Nestor mounting deck.

ℹ Make sure it is oriented with the tube shield strips towards the front of Nestor and the orange and white Tubing Set connectors towards the back of Nestor.



14. Open the sterile pouch containing a Collection Bottle Adapter.

ℹ This procedure can be carried out outside the sterile hood, as sterility considerations do not apply to the Discard Bottle.

15. Unscrew the cap of the provided glass Discard Bottle.



16. Unscrew the Bottle Adapter Ring.



17. Screw the bottle adapter cap onto the Discard Bottle.

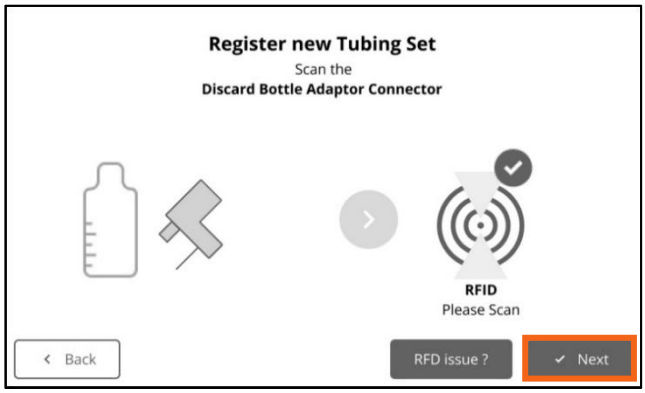
DOMINIQUE DUTSCHER SAS



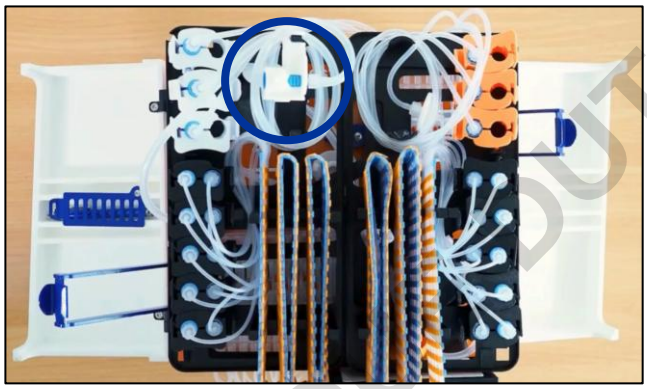
18. Place the RFID tag of the Collection Bottle adapter connector on the RFID scanning area of the control panel.

ℹ A beep will confirm that the scan has been successful.

✕ If unsuccessful, please refer to the procedure « RFID issue ».



19. Click on the 'Next' button.



20. Release the C0 connector from its slot.



21. Place the Tubing Set connector C0 RFID tag connector on the RFID scanning area of the control panel.

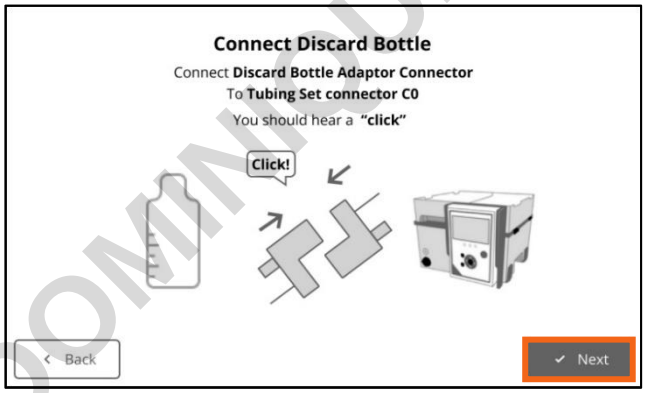
ℹ A beep will confirm that the scan has been successful.

✕ If unsuccessful, please refer to the procedure « RFID issue ».

DOMINIQUE DUTSCHER SAS







22. Connect the Discard Bottle adapter connector to Tubing Set connector C0.

⚠ Caution: Ensure that you hear a 'click' when connecting. An incorrect connection may result in overpressure, causing the tubing channel to open and contaminate the entire fluidic circuit.

23. Click on the 'Next' button.

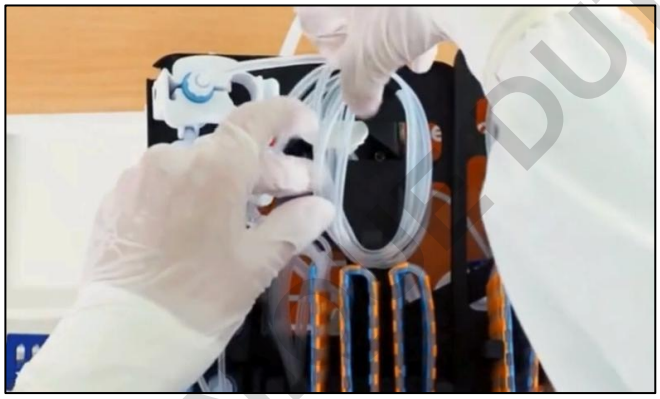
DOMINIQUE DUTSCHER SAS

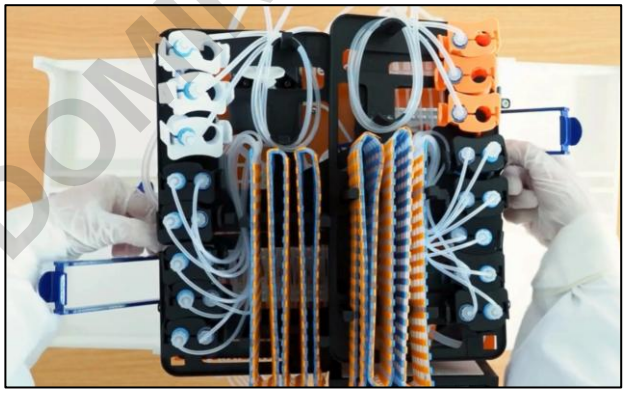


24. Release the Air Filter from its slot



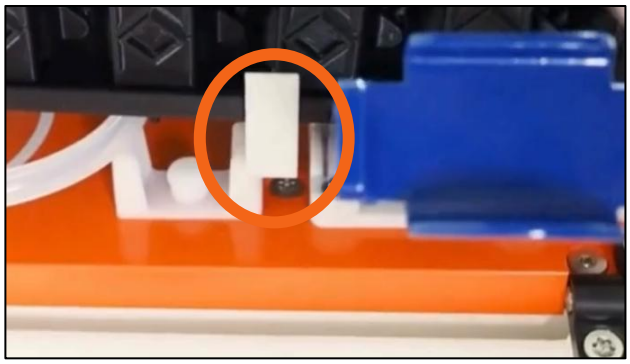
25. Release a few loops of tubing from each side of the Mounting Plate to provide slack.





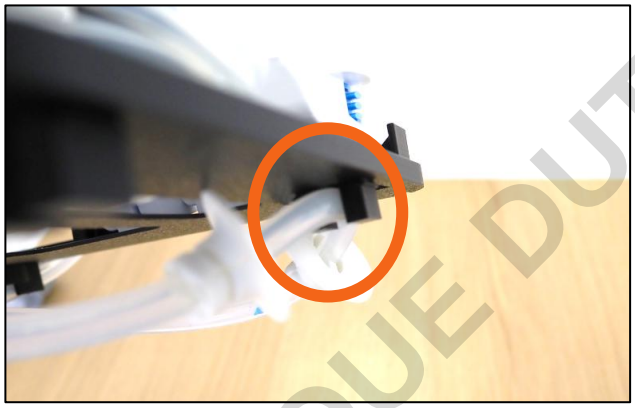
26. Remove the white retaining clips on both sides of the Mounting Plate.

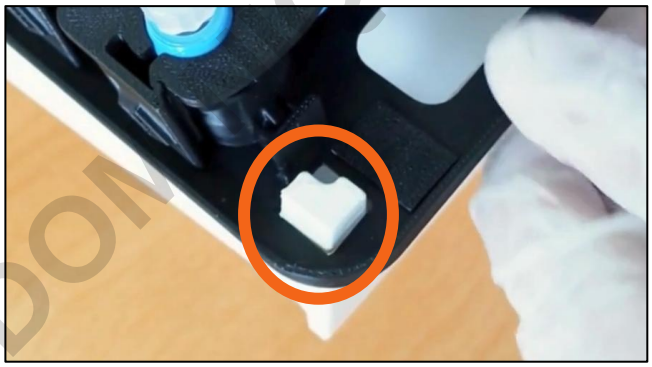
DOMINIQUE DUTSCHER SAS





27. At the top left corner of the Mounting Plate, use your finger to release the tubing attached underneath from the clamps.

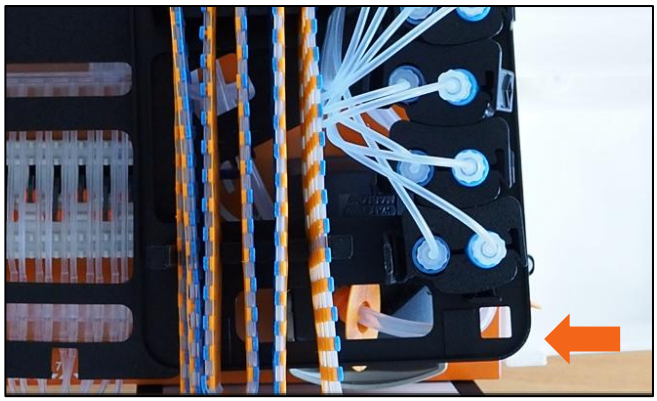




28. Separate the left part of the Mounting Plate and place it on the left Hinge Cover.

ℹ Insert the corner slots of the Mounting Plate onto the posts of the Hinge Cover to secure it in place.

DON QUE DUTSCHER SAS



29. At the lower right corner of the Mounting Plate, use your finger to release the tubing attached underneath, from the clamps.





30. Place the right part of the Mounting Plate on the right Hinge Cover.

ℹ Insert the corners slots of the Mounting Plate onto the posts of the Hinge Cover to secure it in place.

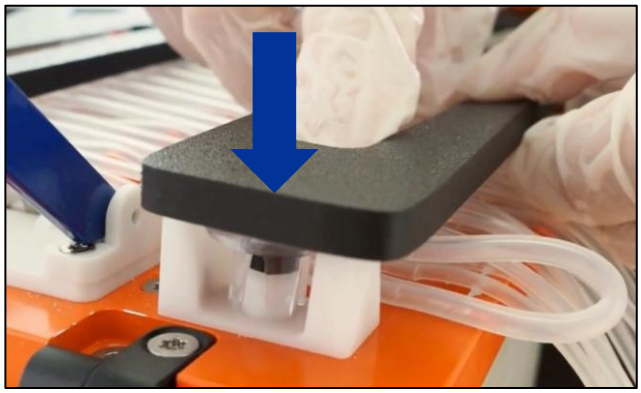
ℹ Make sure to route the tubes in front of the control panel.

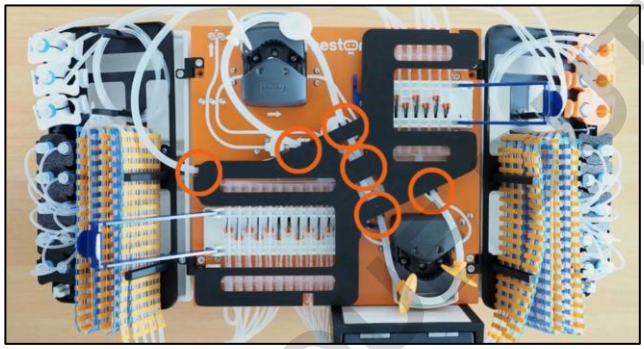


DOMINIQUE DUTSCHER SAS



31. Insert your fingers into the intended slots of the central part of the Mounting Plate to clip the Flow Splitters into place on the corresponding mounting posts of the Nestor mounting deck.





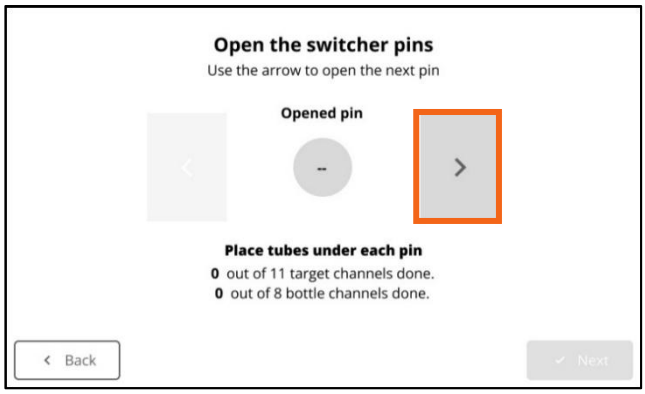
32. Release the tubings from their attachment clamps on the central part of Mounting Plate.



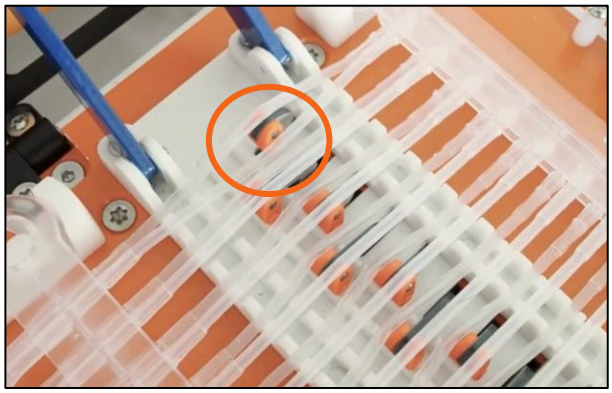
33. Hold the flow splitters in place and remove the central part of the Nestor mounting Plate and dispose of it.

34. Make sure the tubings are repositioned so they do not pass in front of the control panel.

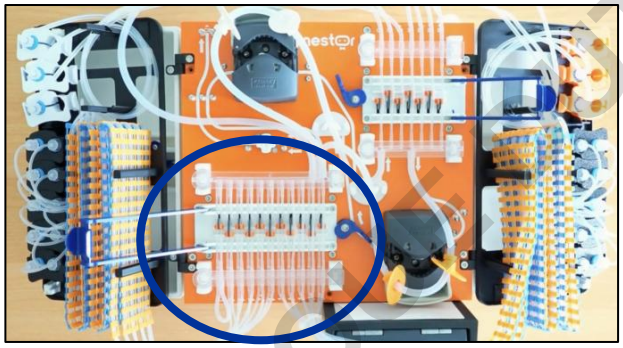
DOCUMENT HOPSTSCHER SAS



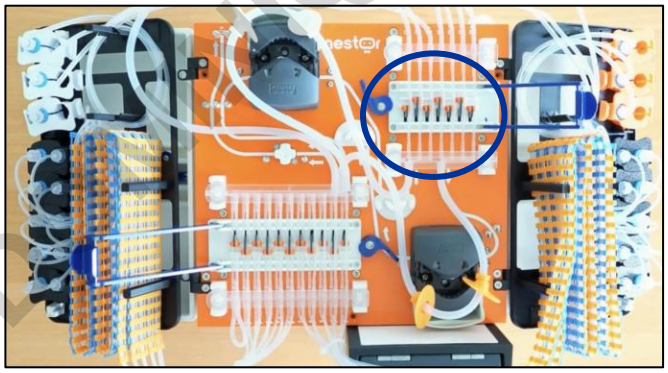
35. Click on the right arrow to start the Vessel Switcher pin opening sequence. This will open the first pin.



36. Slide the two LB tubes under their corresponding Switcher pin using the provided tweezers, ensuring they are securely seated beneath the pin

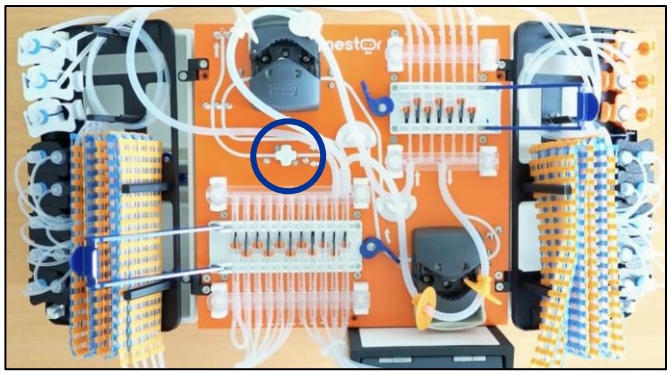


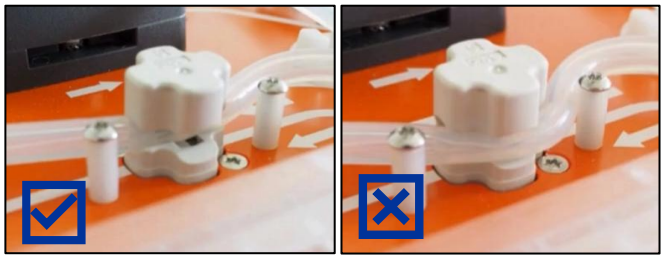
37. Repeat the procedure to install the tubes for all 11 Vessel Switcher channels, from channel LB to channel T10.

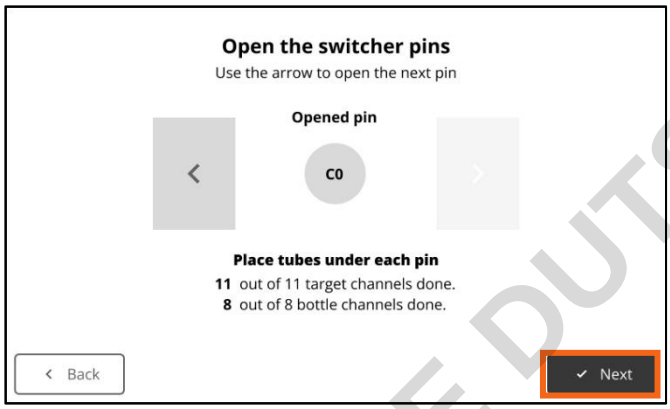


38. Repeat the Procedure for the 7 Bottle Switcher pins, from channel S0 to channel C1.

DOCUMENT HEINSCHER SAS







39. Insert the C0 tube hose into the C0 pin.

Pull slightly on the sides of the hose to temporarily reduce its diameter and make it easier to insert.

Caution: make sure to push the tube all the way into the stop of the pin.

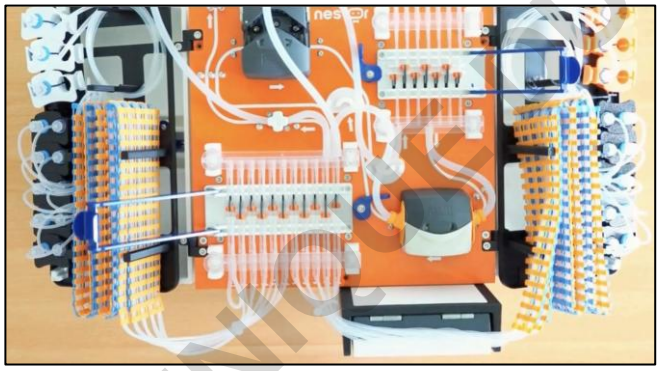
40. Click on the ‘Next’ button.

DOMINIQUE DUTSCHER SAS



41. Insert the tube into the Feed Pump and aligning the Tube Positioning Collars on each side of the pump.



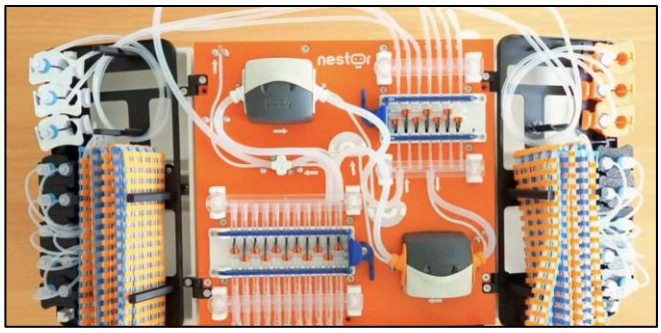


42. Close the pump by flipping the pump cover upwards to lock it in place.

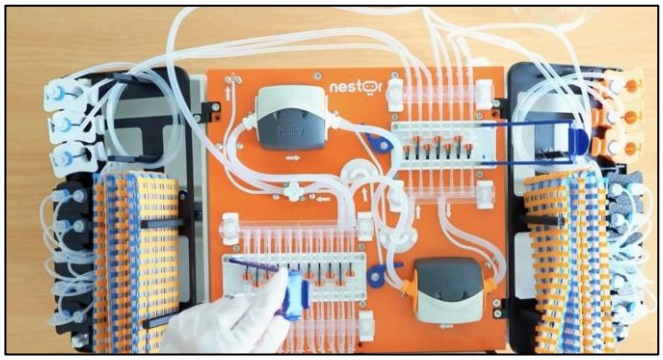


43. Insert the tube into the Collecting Pump, aligning the tube positioning collars on each side of the pump.

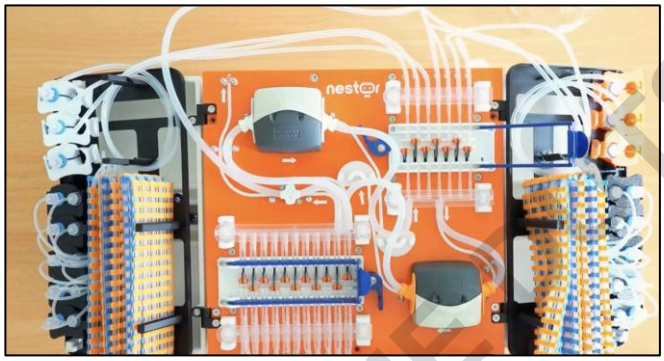
DOMINIQUE DUTSCHER SAS



44. Close the pump by flipping the lid downwards to lock it in place.



45. Lift the Vessel Switcher Flap downward to close it.



46. Flip downward the tab of the Vessel Switcher Flap to lock it.

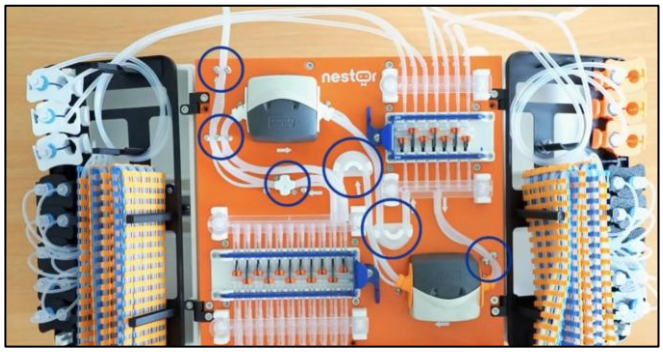


47. Flip downward the tab of the Bottle Switcher Flap to lock it.

DOMINIQUE FISCHER SAS



48. Lift the Bottle Switcher Flap upwnward to close it.

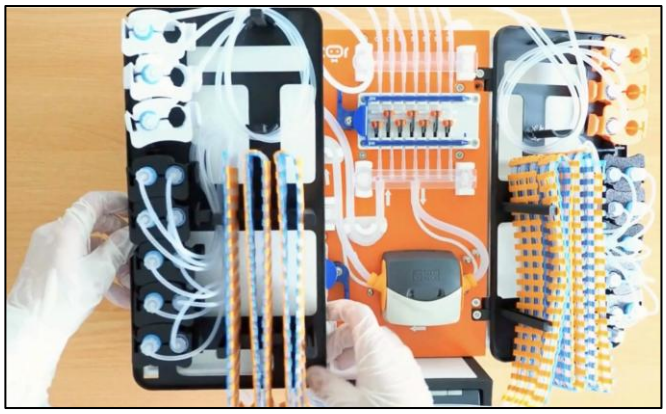


49. Insert the loose tubes into the corresponding Tube Guide Posts to secure them in place.



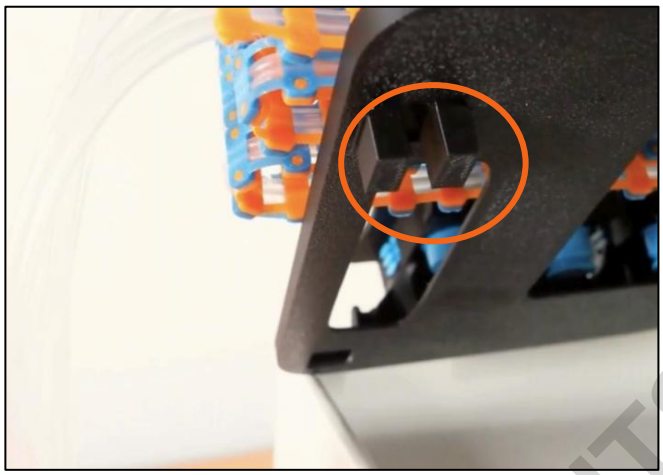
50. Lift the left panel of the Tubing Set Mounting Plate and store the tweezers in their dedicated compartment.

DOMINIQUE DUTSCHER SAS



51. Close the left panel of the Hinged Cover and place the left side of the Tubing Set Mounting Plate onto.

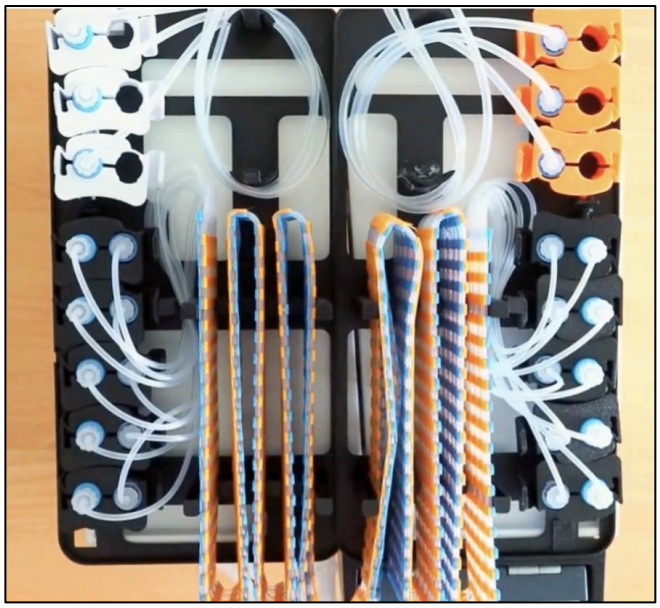
ℹ Hold it in place by inserting the three clamps into the edges of the cover





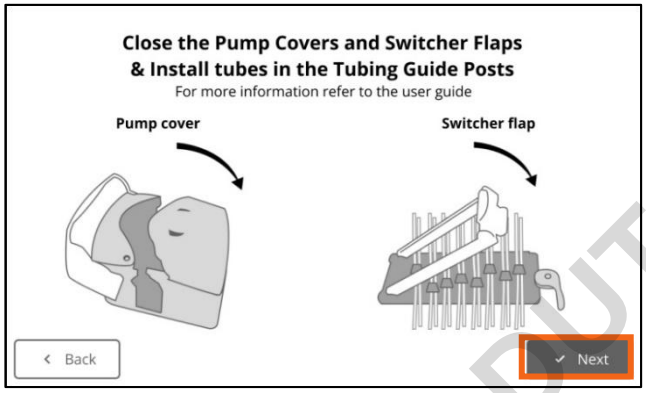
52. Lift the right panel of the Tubing Set Mounting Plate.

DOMINIQUE DUTSCHER SAS



53. Close the left panel of the Hinged Cover and place the left side of the Tubing Set Mounting Plate onto.

    ℹ Hold it in place by inserting the three clamps into the edges of the cover

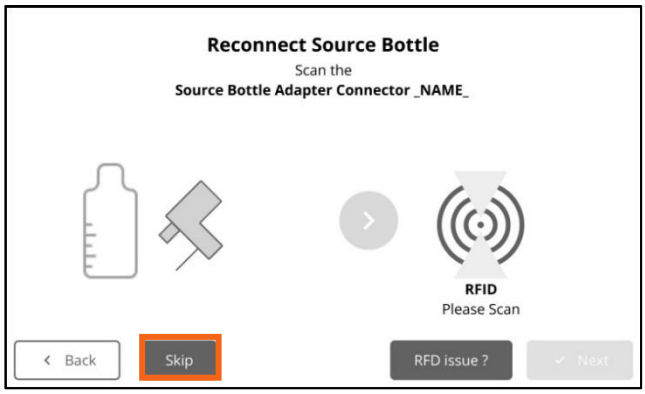


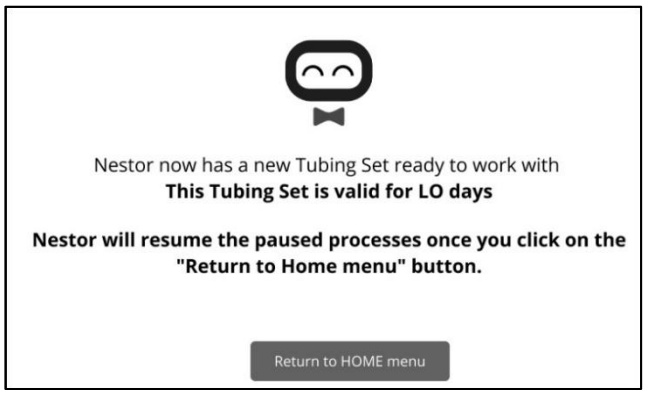
54. Click on the 'Next' button.



55. Screw the vacuum tube that is already connected to the back side of Nestor onto the Discard Bottle Adapter cap.

DOMINIQUE DUTSCHER SAS





56. If any vessels or bottles were attached to the previous tubing set, the system will now prompt you to reconnect them to their corresponding channels.

    If you do not wish to reconnect a peripheral, press the “Skip” button. The channel will be paused, and a vessel can be reconnected after the Tubing Set installation is complete.

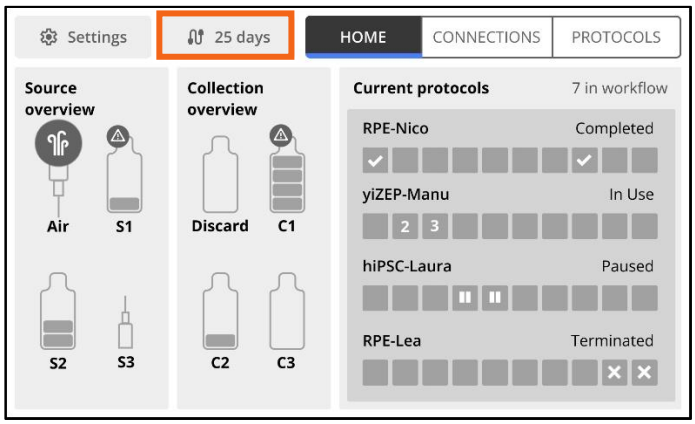
57. Complete the procedure by pressing the ‘Return to HOME menu” button on the Nestor control panel screen.

Remember to store your source bottles in the refrigerator and your targets in your incubator.

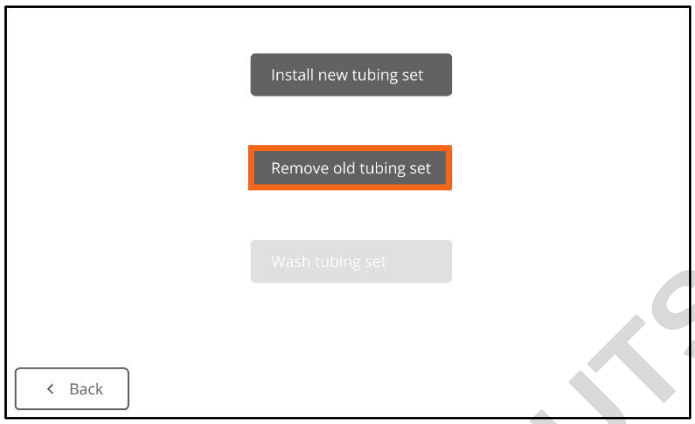
The tubing set is now in place. Its service life is 30 days. After this period, it must be replaced to ensure the reliability of the dispensed volumes.

DOMINIQUE DUTSCHER SAS

TUBING SET REMOVAL

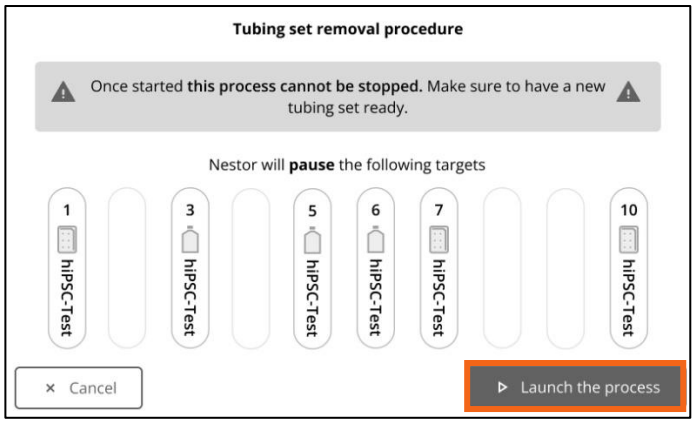


1. Click on the “Tubing Set” button.



2. Click on the “Remove old tubing set” button.

DOMINIQUE DUTSCHER SAS



3. Nestor will inform you of the impact of this operation on the connected vessel targets.

ℹ Nestor will pause any ongoing protocols and will resume them when a new tubing set has been installed.

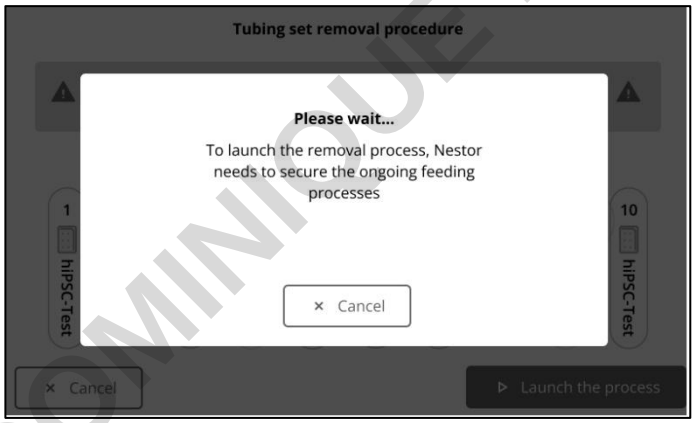
⚠ Caution: Once launched, this process cannot be cancelled.

Make sure to:

- keep the source bottles in the refrigerator,
- keep the targets in the incubator,
- set the collection bottles aside.

ℹ The system remembers the position of each adapter, which allows protocols to be resumed from where they were interrupted when a new tubing set is installed.

Click on the 'Launch the process' button to start the procedure.



ℹ To avoid any loss of cultured cells, this procedure is only allowed after the last medium addition.

Once this step is completed, Nestor automatically proceeds to the next one.

DOMINIQUE DUTSCHER SAS



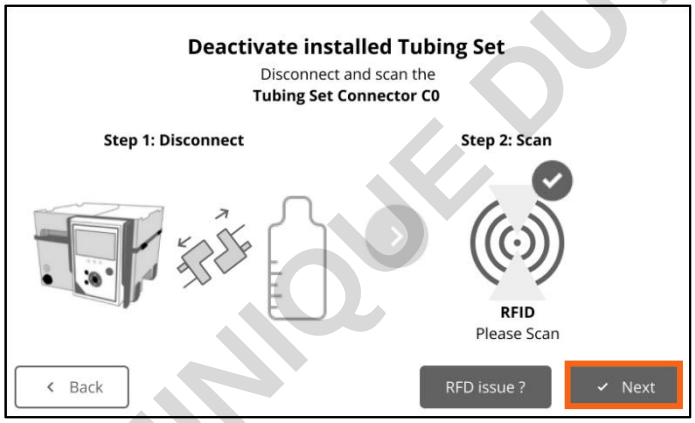
4. Disconnect Tubing Set Connector C0 from the Discard Bottle Adapter Connector.



5. Place the RFID tag of the Discard Bottle Adapter connector on the RFID scanning area of the control panel.

ⓘ A beep will confirm that the scan has been successful.

⊗ If unsuccessful, please refer to the procedure « RFID issue ».

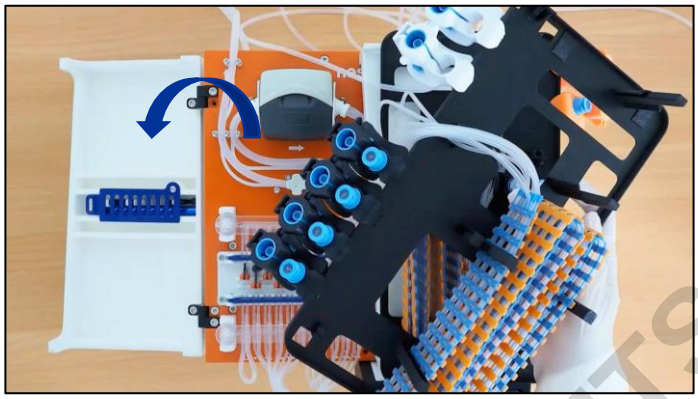


6. Click on the ‘Next’ button.

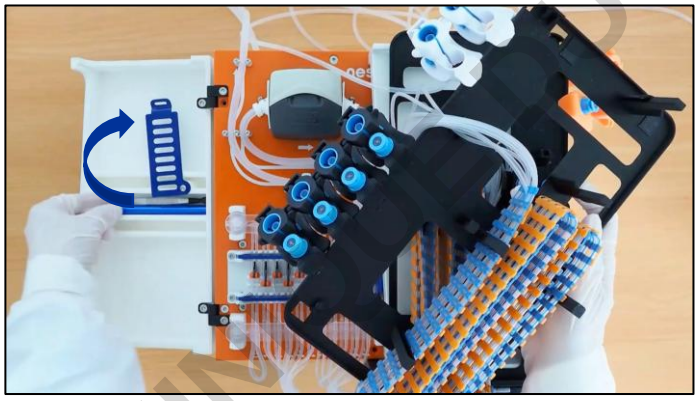
DOMINIQUE DUTSCHER SAS



7. Lift the left tray of the Tubing Set Mounting Plate.

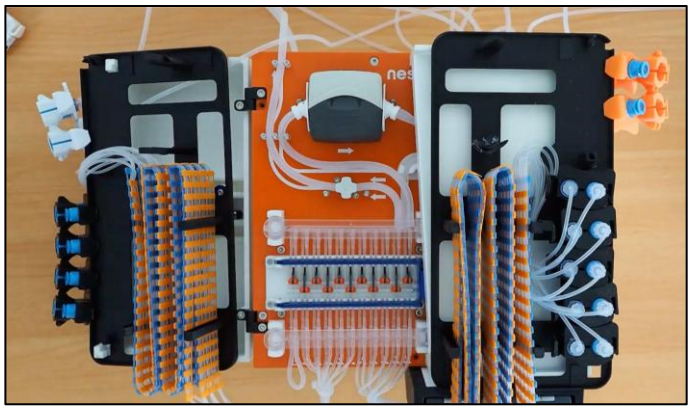


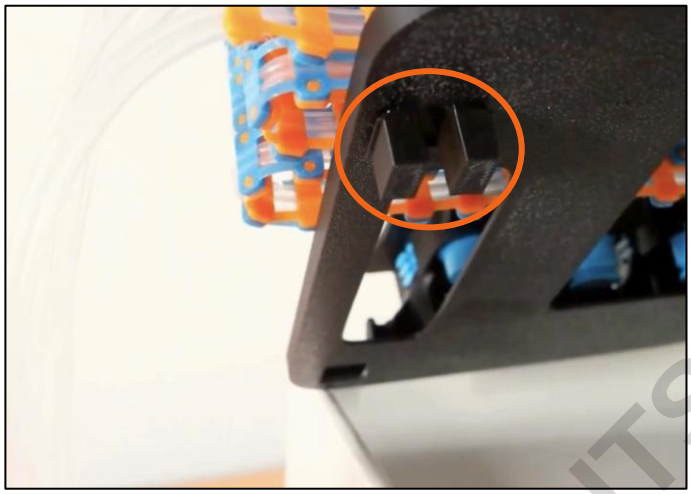
8. Tilt the left Hinge Cover.



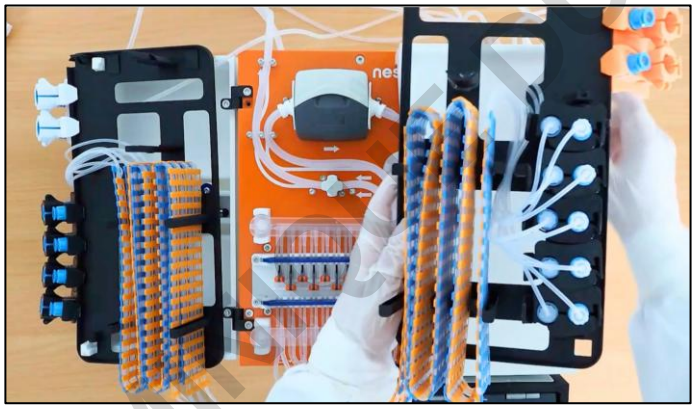
9. Open the storage compartment on the left side of the hinged cover by flipping the tab, then remove the tweezers.

DOMINIQUE DUTSCHER SAS

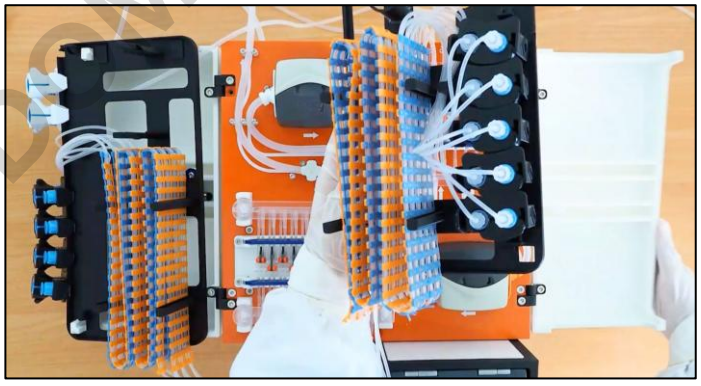




10. Place the left side of the Tubing Set Mounting Plate onto the Hinge Cover and secure it using the dedicated slots.

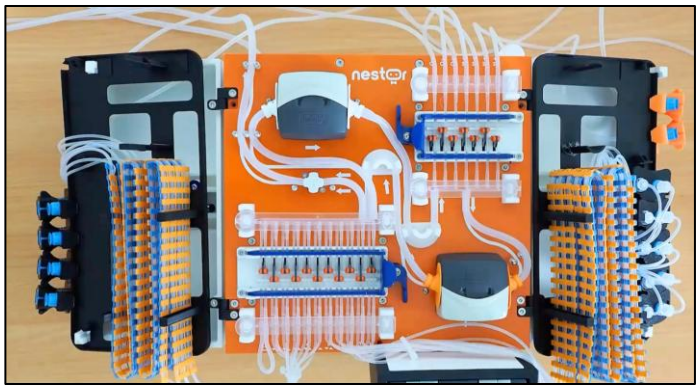


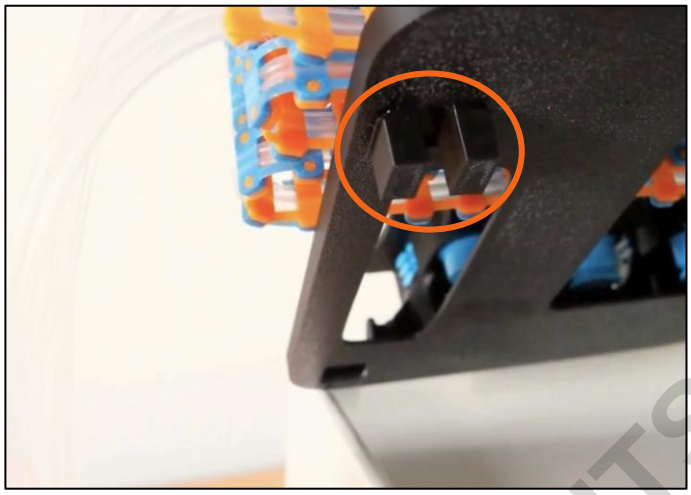
11. Lift the right tray of the Tubing Set Mounting Plate.



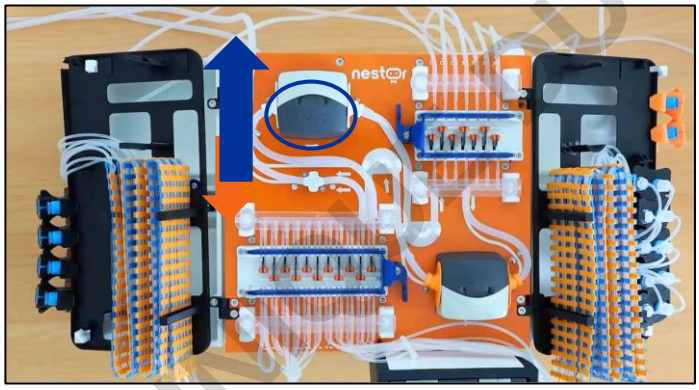
12. Tilt the right Hinge Cover.

DOCUMENT DUTSCHER SAS





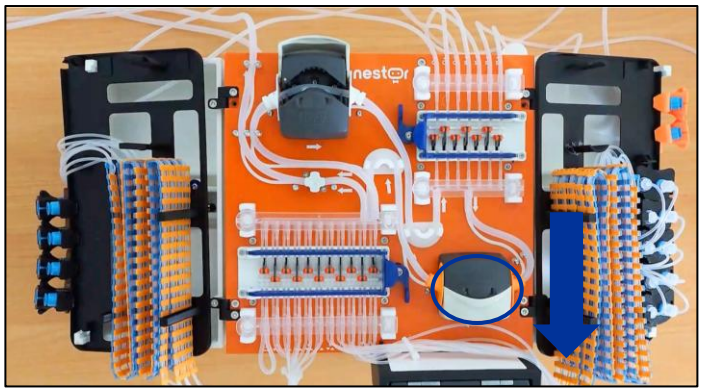
13. Place the right side of the Tubing Set Mounting Plate onto the Hinge Cover and secure it using the dedicated slots.



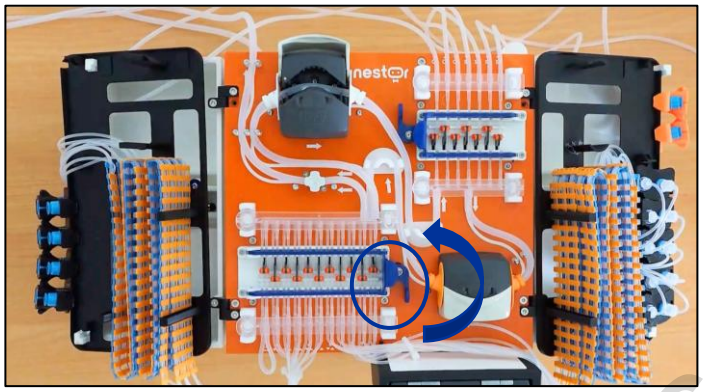


14. Open the Collecting Pump by flipping the cover forward.

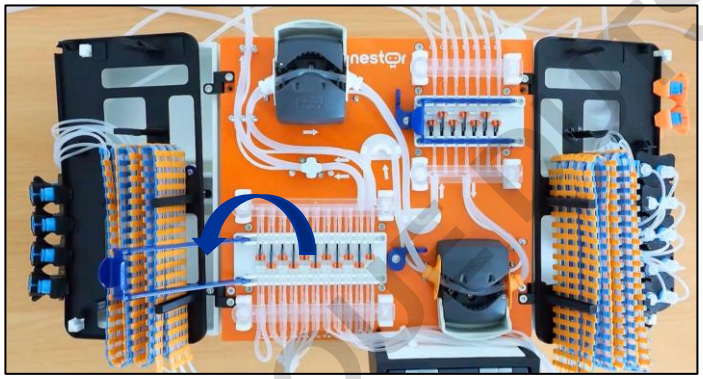
DOWNLOADED BY DUTSCHER SAS



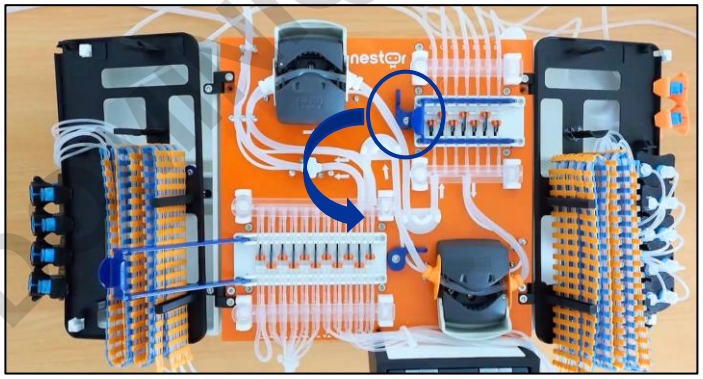
15. Open the Feed Pump by flipping the cover backward.



16. Flip upward the tab of the Vessel Switcher Flap to unlock it.

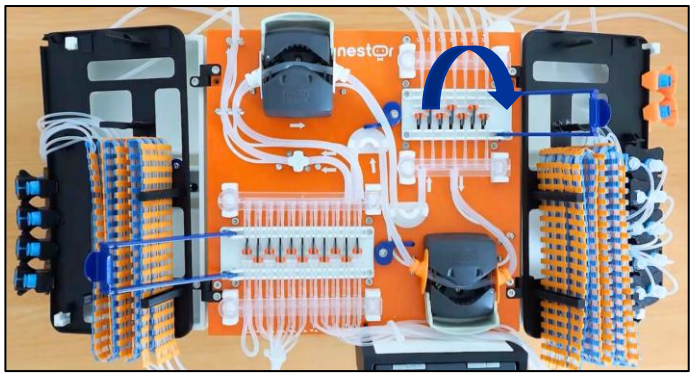


17. Lift the Vessel Switcher Flap upward to open it.

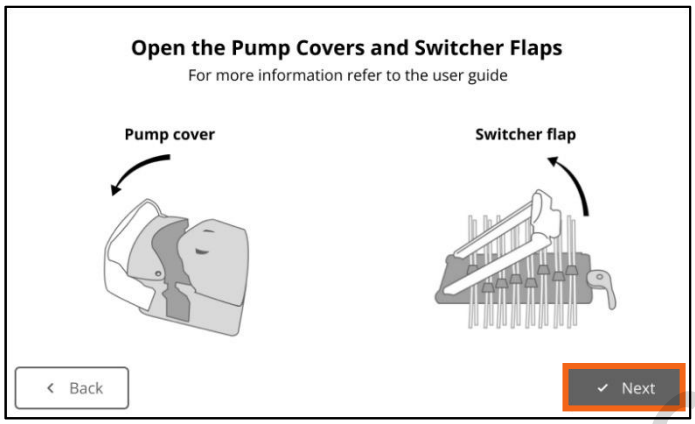


18. Flip downward the tab of the Bottle Switcher Flap to unlock it.

DOCUMENT FISCHER SAS



19. Lift the Bottle Switcher Flap upward to open it.



20. Click on the 'Next' button.



21. Disconnect all the Source Bottle from the Tubing Set Connectors.

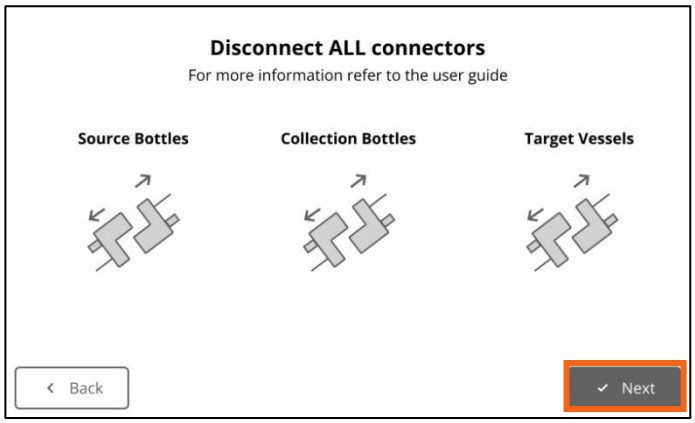


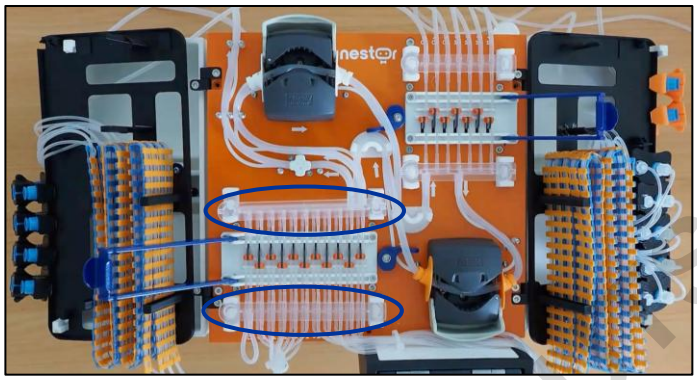
22. Disconnect all the Collection Bottles from the Tubing Set Connectors.

DOMINIQUE DUTSCHER SAS

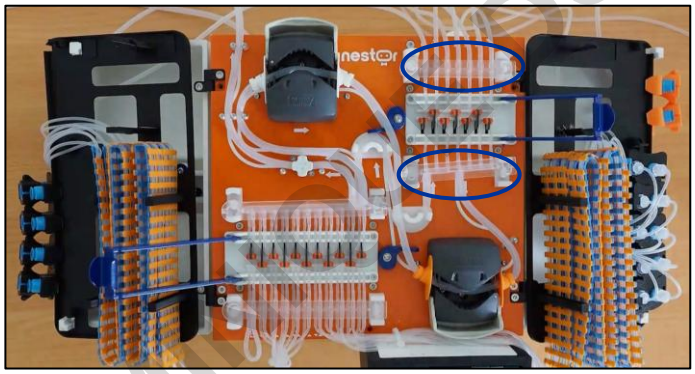
23. Disconnect all the Target Vessel Connectors from the Tubing Set Connectors.

24. Click on the ‘Next’ button.

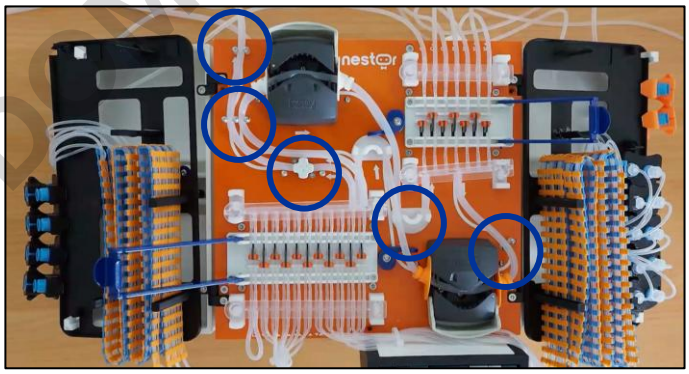




25. Remove the lower and upper Flow Splitters from the Vessel Switcher Mounting Posts.

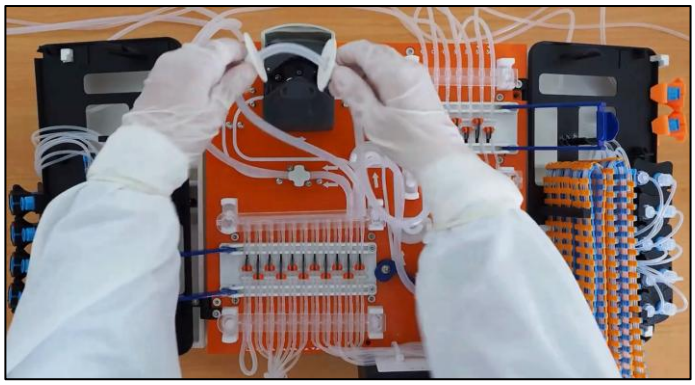


26. Remove the lower and upper Flow Splitters from the Bottle Switcher Mounting Posts.

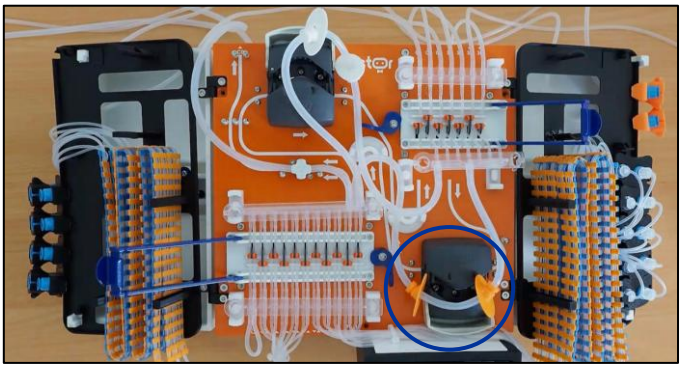


27. Remove the tubes from the Tube Guide Posts.

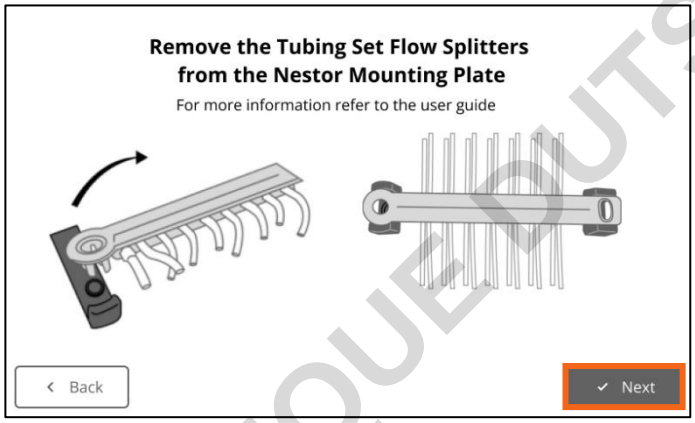
DOCUMENT PROPRIETAIRE FISCHER SAS



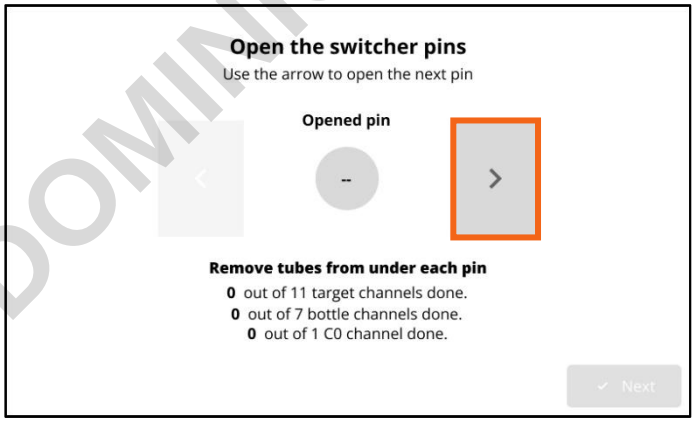
28. Remove the tubes from the Collecting Pump.



29. Remove the tubes from the Feeding Pump.



30. Click on the 'Next' button.



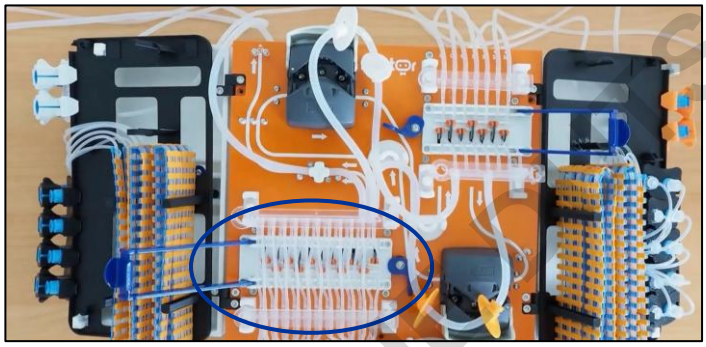
31. Click on the right arrow to start the Vessel Switcher pin opening sequence.

DOMINIQUE DUTSCHER SAS

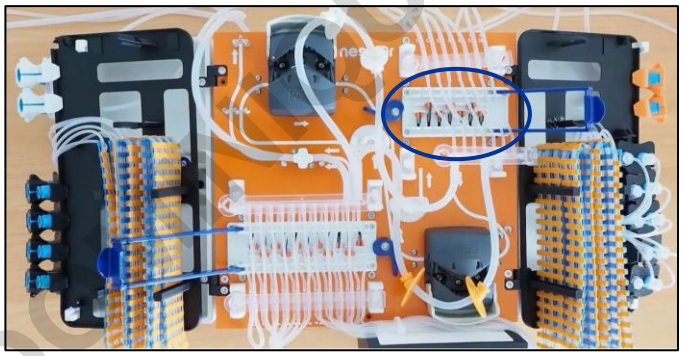




32. Remove the tubes from underneath the LB pin using the provided tweezers.

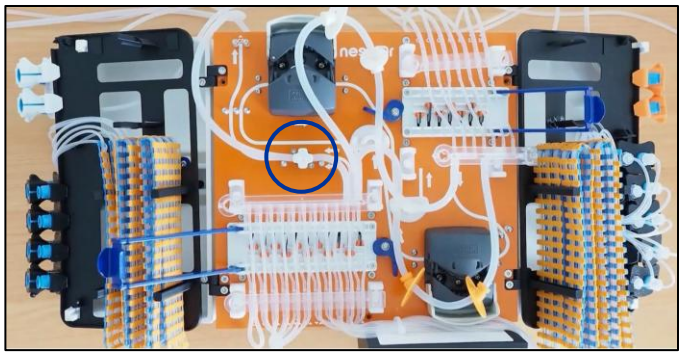


33. Repeat the procedure to remove the tubes for all 11 Vessel Switcher channels, from channel LB to channel T10.



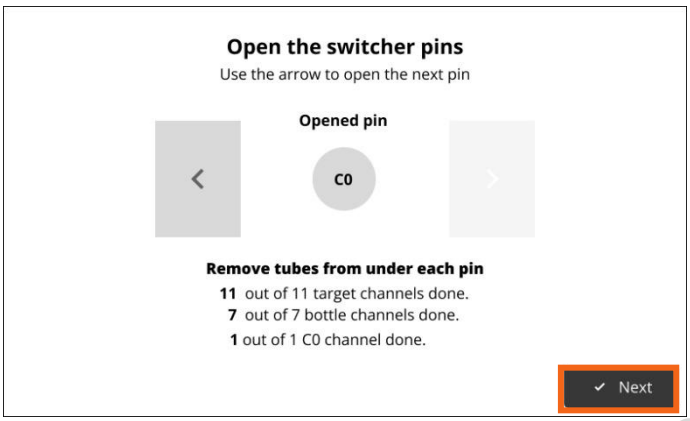
34. Once this procedure is complete, repeat the same steps for the 7 Bottle Switcher pins, from channel S0 to channel C1.

DOCUMENT PROPRIETAIRE SCHER SAS



35. Remove the tube from under the C0 pin.

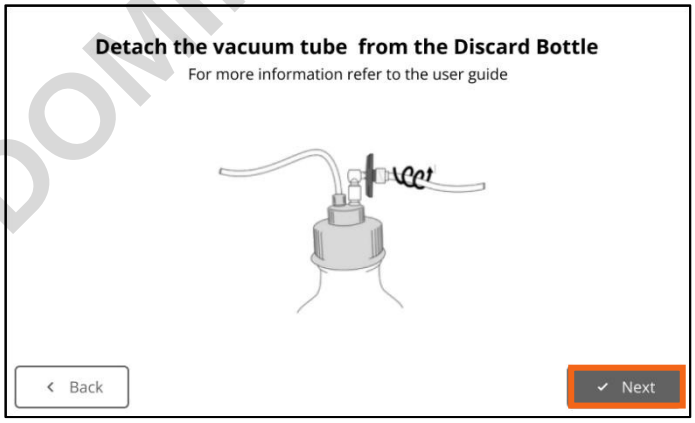
ⓘ Pull slightly on the sides of the hose to temporarily reduce its diameter and make it easier to remove.



36. Click on the 'Next' button.

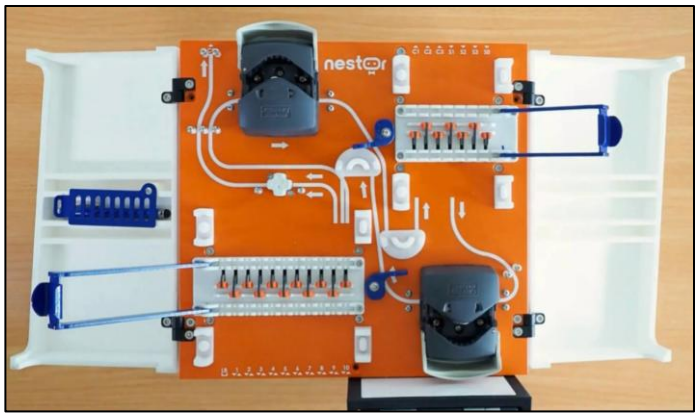


37. Unscrew and detach the Vacuum Tube that is connected the Discard Bottle Adapter Cap.



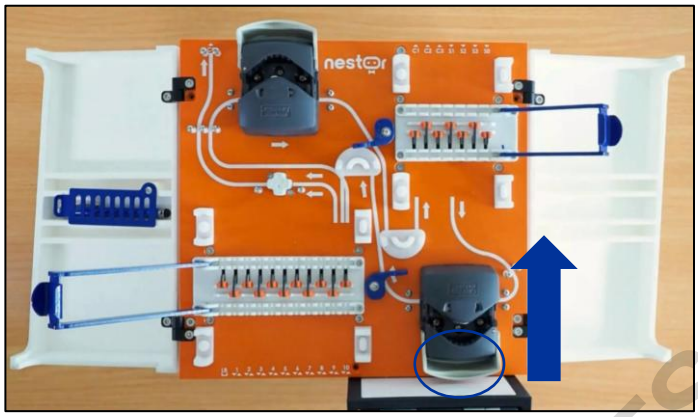
38. Click on the 'Next' button.

DOMINIQUE DUTSCHER SAS

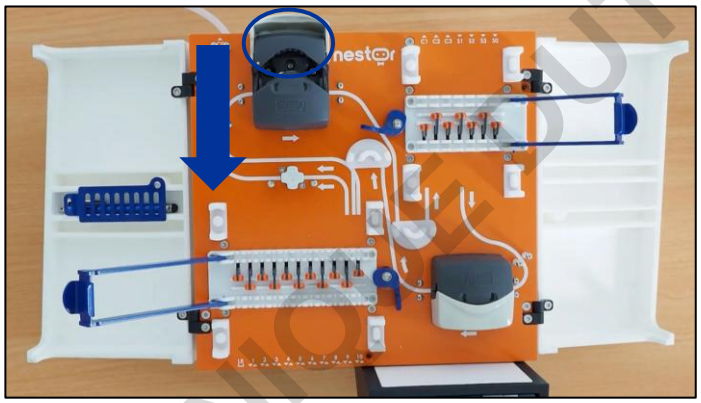


39. Remove the Tubing Set.

Be sure to dispose of the tubing set in the appropriate waste container.



40. Close the Feed Pump cover by flipping the cover backward.



41. Close the Collecting Pump cover.



42. Close the Vessel Switcher Flap and flip the tab to lock it in place.

DOMINIQUE DUTSCHER SAS



43. Close the Bottle Switcher Flap and flip the tab to lock it in place.



44. Complete the procedure by pressing the 'Next' button on the Nestor Control Panel screen.



45. Store the tweezers in the dedicated compartment.



Close the Hinged Cover.

46.

DOMINIQUE DUTSCHER SAS

ADAPTER CONNECTION

⚠ The following procedure must be carried out under aseptic conditions inside a hood.



1. Under the sterile hood, remove the cap of the Source Bottle.

ⓘ Discard the cap in the appropriate waste container.



2. Remove the Source Bottle Adapter from its sterile pouch.



3. For GL38 bottles, simply screw the Adapter Ring onto the bottle neck until it is firmly secured.

   It must fully cover the neck of the source bottle.

DOMINIQUE DUTSCHER SAS



For GL45 bottles, remove the Adapter Ring before screwing the Source Bottle Adapter directly onto the bottle neck.

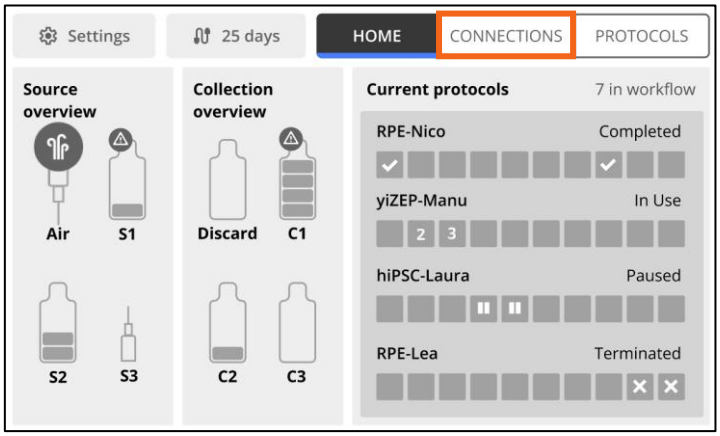


4. If necessary, to adjust the length of the aspiration tube, loosen the compression fitting.

   Adjust the tube so that it reaches the bottom of the bottle. Then, firmly retighten the fitting.

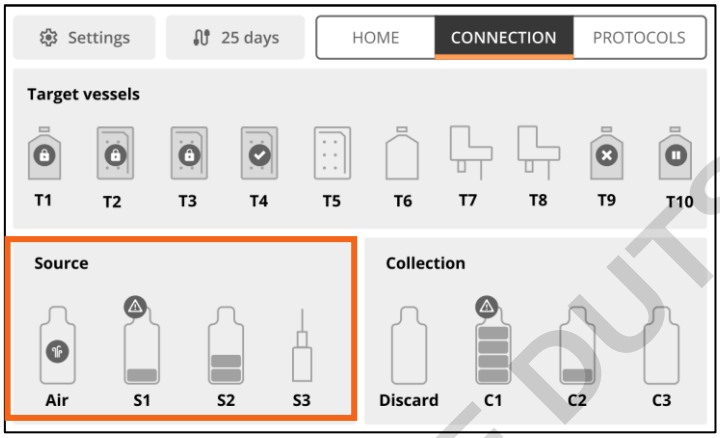
5. Thanks to the sterile connector, the bottle is now ready to be safely used outside the sterile hood without risk of contamination.

DOMINIQUE DUTSCHER SAS

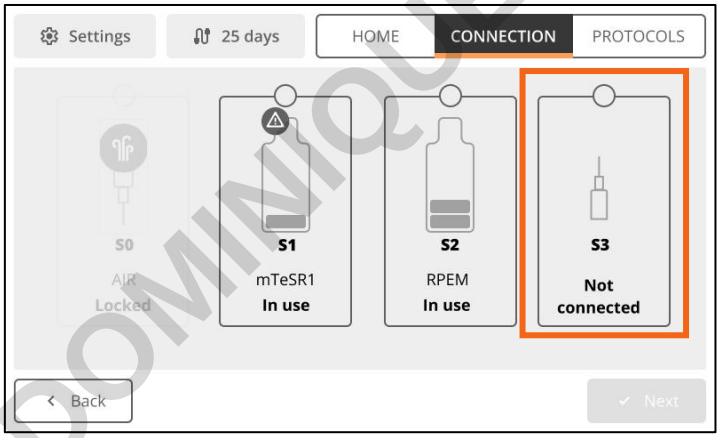


1. Bring your Source Bottle equipped with a Source Bottle Adapter.

2. Click on the “Connection” button.



3. Click on the Source Bottles area.



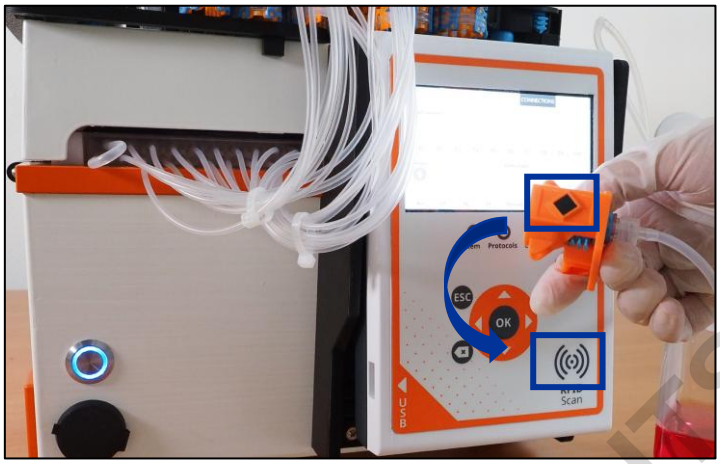
4. Click on the connectors of the lines where you want to connect your Source Bottles.

The lines available for a new bottle connection are shown with a disconnected connector and have the status “Unconnected.”

DOMINIQUE DUTSCHER SAS



5. Click on the “Next” button.

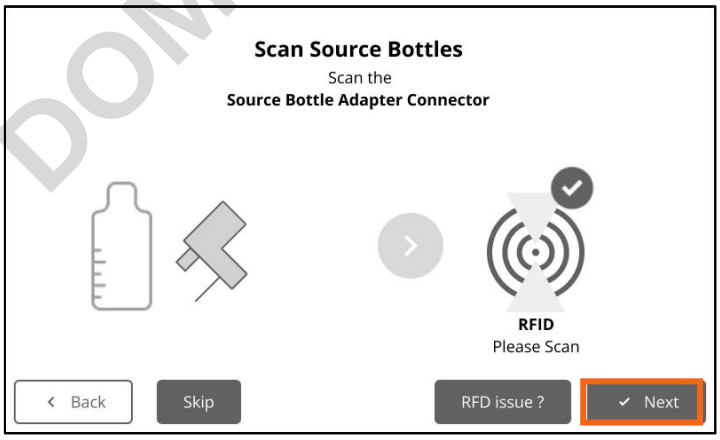


6. Place the RFID tag of the Source Bottle Adapter Connector on the RFID scanning area of the control panel.

ℹ An audible beep will confirm that the scan is successful.

✕ In case of unsuccessful scan, please refer to the “RFID issue” procedure.





7. Click on the “Next” button.

DOMINIQUE DUTSCHER SAS



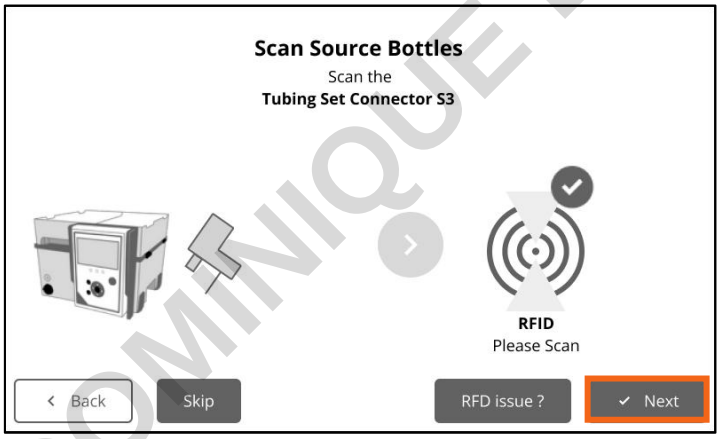
8. Place the RFID tag of the Tubing Set Connector for the previously selected line on the RFID scanning area of the control panel.

ℹ Source connectors are orange, and their number is indicated on the RFID tag.

ℹ An audible beep will confirm that the scan is successful.

✖ In case of unsuccessful scan, please refer to the “RFID issue” procedure.





9. Click on the “Next” button.

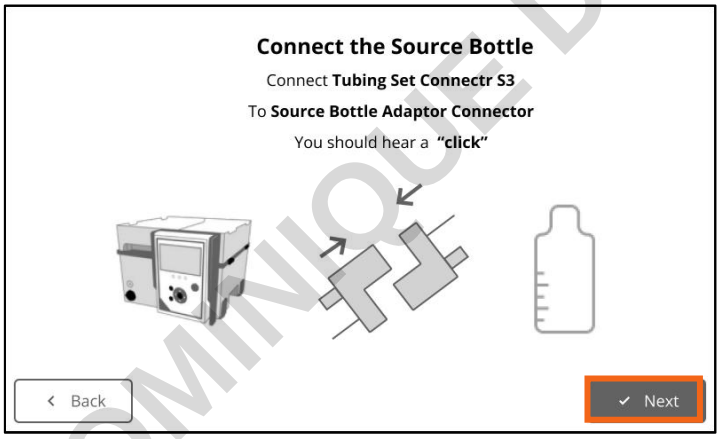
DOMINIQUE DUTSCHER SAS



10. Connect the Source Bottle Adapter Connector to the Tubing Set Connector.

⚠ Caution: Ensure that you hear a ‘click’ when connecting. An incorrect connection may result in overpressure, causing the tubing channel to open and contaminate the entire fluidic circuit.





11. Click on the “Next” button.

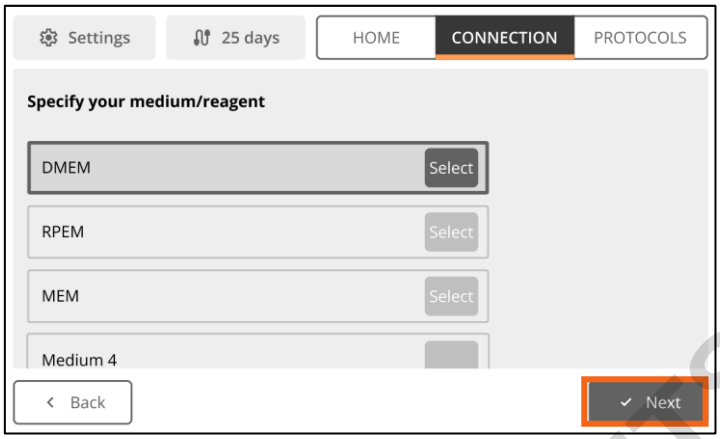
DOMINIQUE DUTSCHER SAS



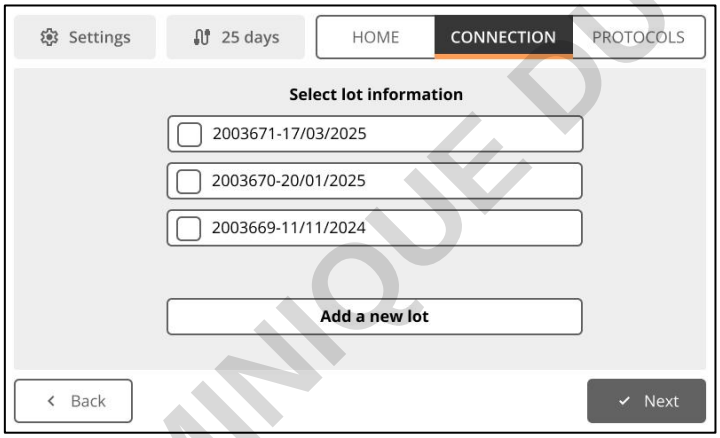
12. Select the culture medium associated with the connected Source by clicking on the “Select” button.

Scroll through the list by swiping up on the screen.

ℹ If the medium you want to connect is not in the list, click the ‘+’ button.



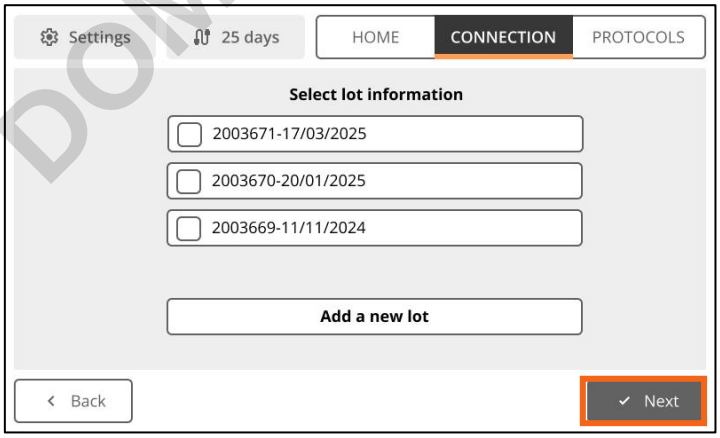
13. Click on the “Next” button.



14. You must enter the lot number and expiry date of the source you want to connect.

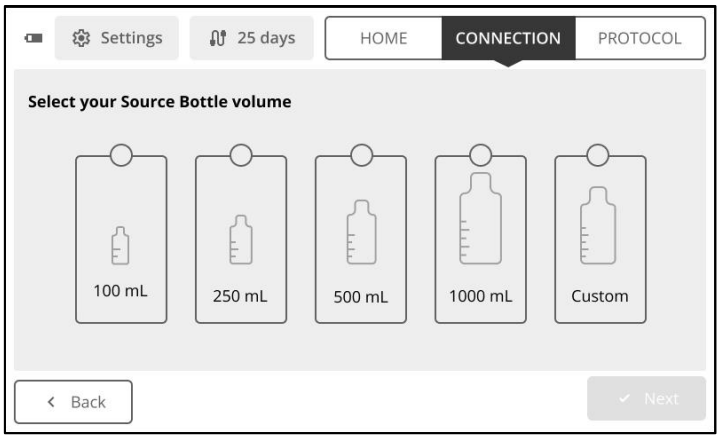
If this information has already been recorded, select it directly from the list provided.

If it does not appear, click on the area below the list to enter it manually.



15. Click on the “Next” button.

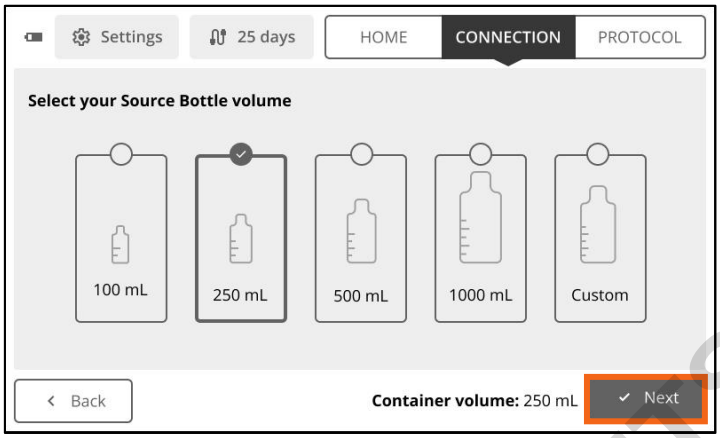
DOMINIQUE DUTSCHER SAS



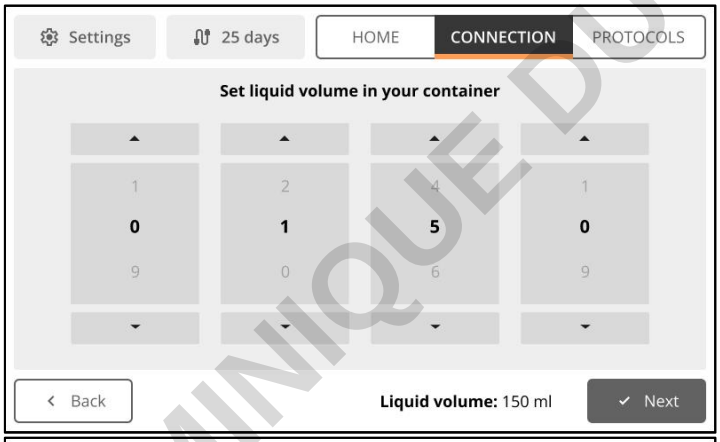
16. Select the volume of the container you have just connected to the Tubing Set.

ℹ It is also possible to use the “Custom” option to set an intermediate volume that is not listed.

ℹ The volume must be entered in millilitres (mL).



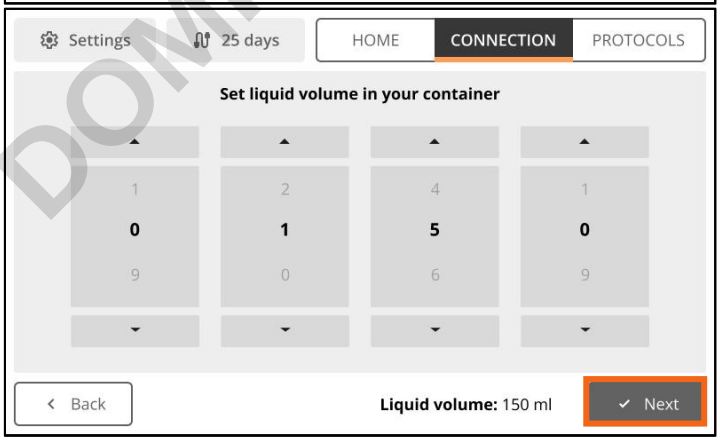
17. Click on the “Next” button.



18. Use the arrows to select the Source volume.

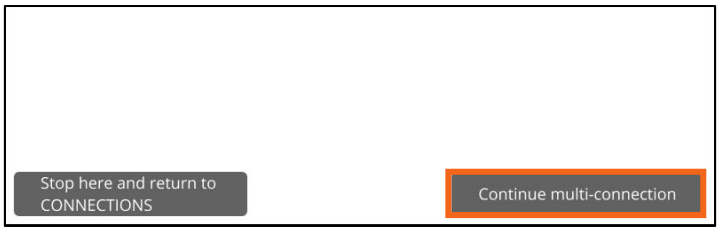
ℹ The volume must be entered in millilitres (mL).

ℹ A minimum volume of 5 mL must be added.

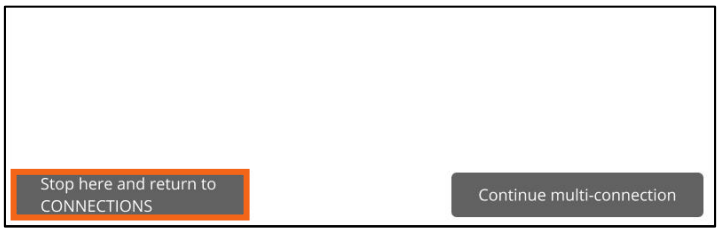


19. Click on the “Next” button.

DOMINIQUE DUTSCHER SAS



20. Click the ‘Continue multi-connection’ button to move on to the next connection.



ℹ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to connect a new Source Bottle.



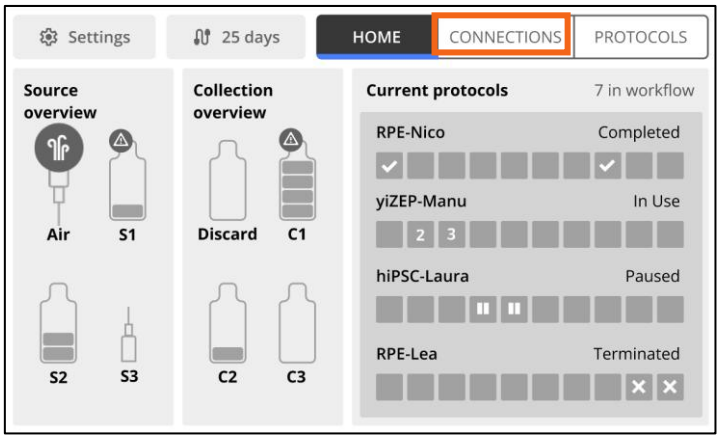
21. Once all connections have been completed, click on ‘Back to Connections’ button to close the procedure.

Store the connected source in the Refrigeration Unit.

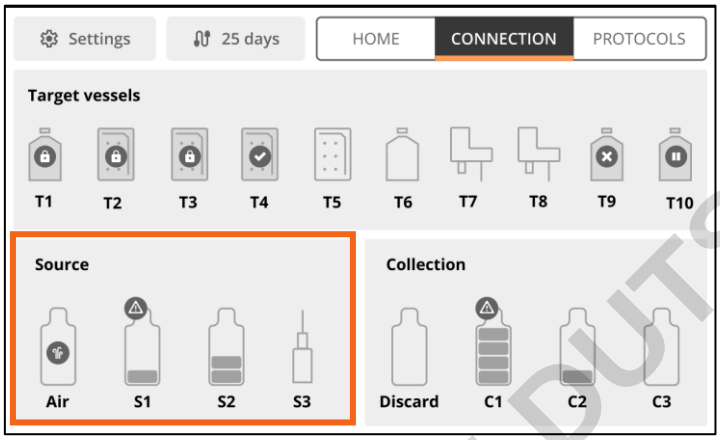
DOMINIQUE DUTSCHER SAS

TEMPORARY DISCONNECTION SOURCE

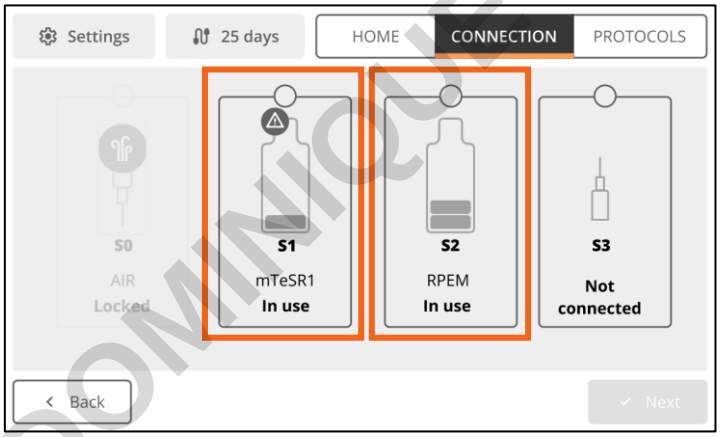
Use this procedure to replace Source Bottles while pausing the protocols that are currently using it.



1. Click on the “Connection” button.



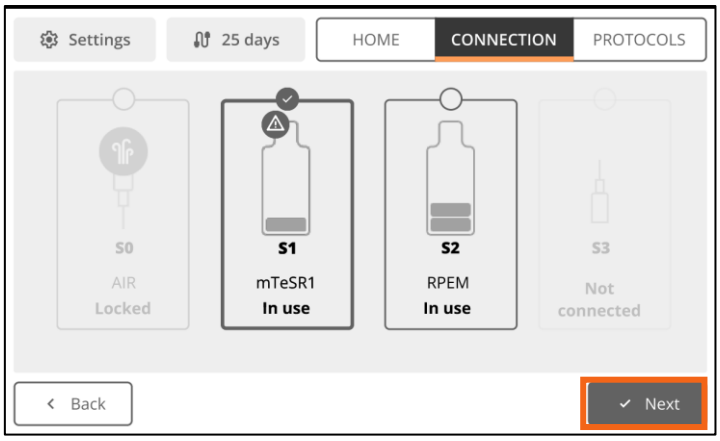
2. Click on the Source Bottles area.



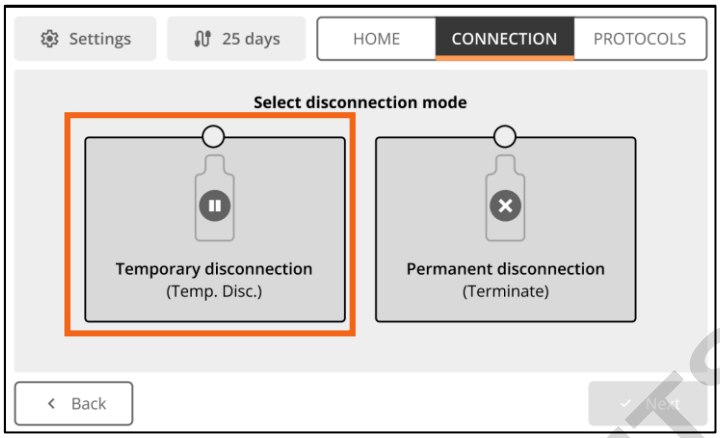
3. Click on the connectors of the lines where you want to disconnect your Source Bottles.

The lines available for this disconnection are shown with a disconnected connector and have the status “In use”.

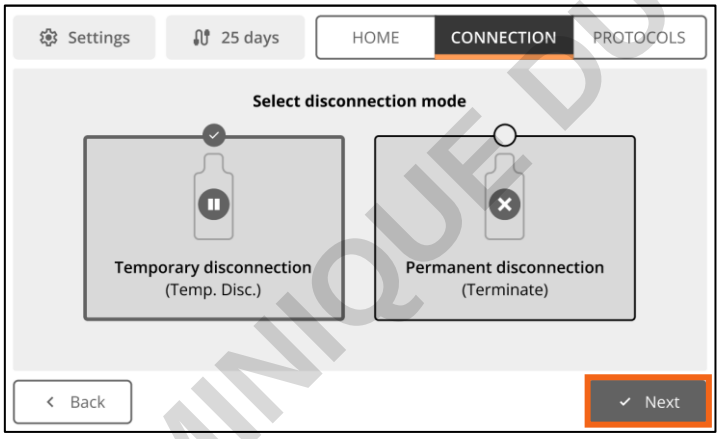
DOMINIQUE DUTSCHER SAS



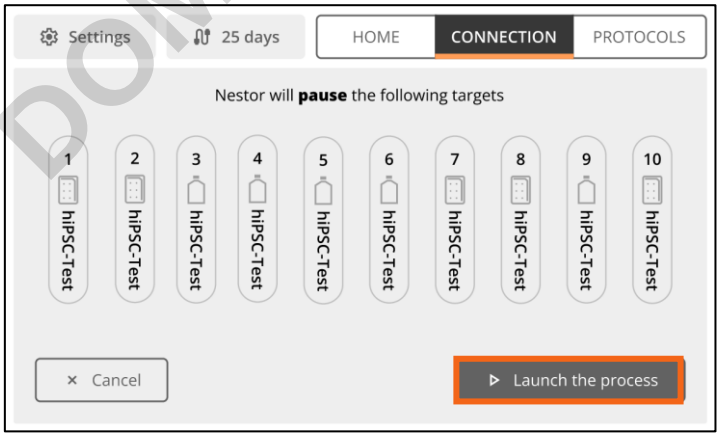
4. Click on the “Next” button.



5. Click on the “Temporary disconnection” button.



6. Click on the “Next” button.

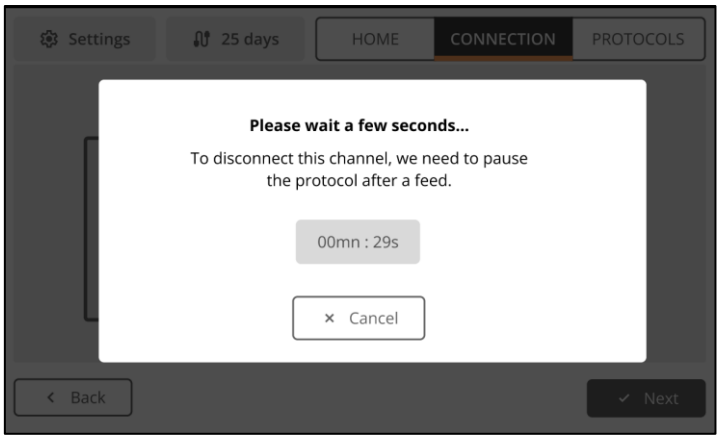


7. Nestor will inform you of the impact of this operation on the connected vessel targets.

   Nestor will pause all protocols using these Source Bottles and will resume them once new Source Bottles are reconnected.

   Click on the ‘Launch the process’ button to start the procedure.

DOMINIQUE DUTSCHER SAS



To avoid losing the cultured cells, source disconnection is only available after the last medium addition.

8. Open the Refrigeration Unit cover and remove the bottles you want to disconnect.



9. Disconnect the Source Bottle Adapter Connector from the Tubing Set Connector.



DOMINIQUE DUTSCHER SAS



10. Place the RFID tag of the Tubing Set Adapter Connector on the RFID scanning area of the control panel.

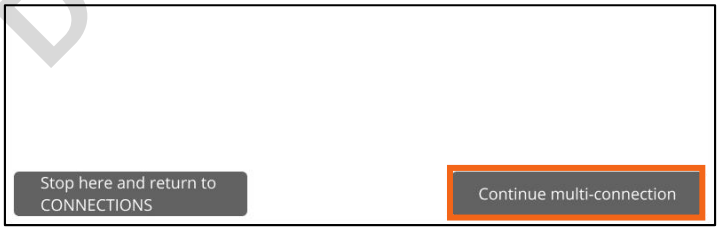
ⓘ An audible beep will confirm that the scan is successful.

⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



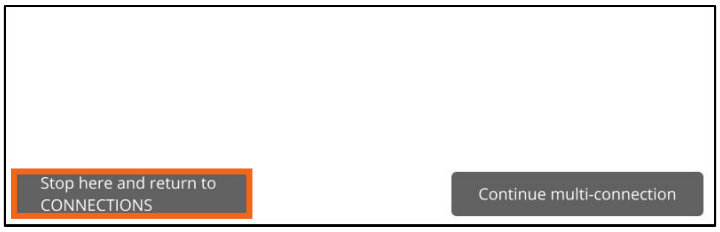


11. Click on the “Next” button.

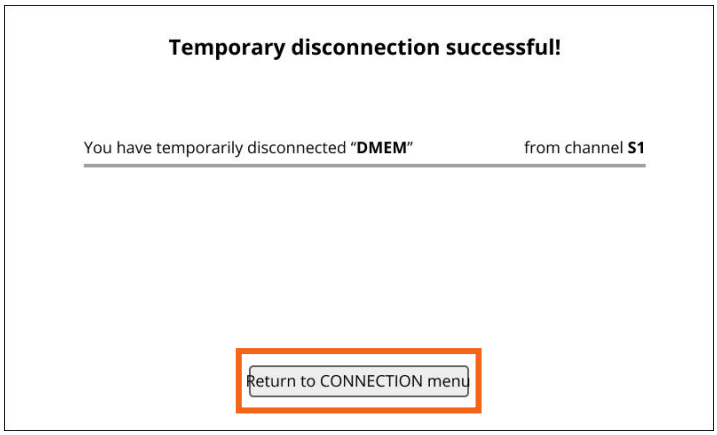


12. Click the ‘Continue multi-disconnection’ button to move on to the next disconnection.

DOMINIQUE DUTSCHER SAS



ℹ Click the 'Stop here and return to CONNECTIONS' button if you do not want to disconnect another Source Bottle.

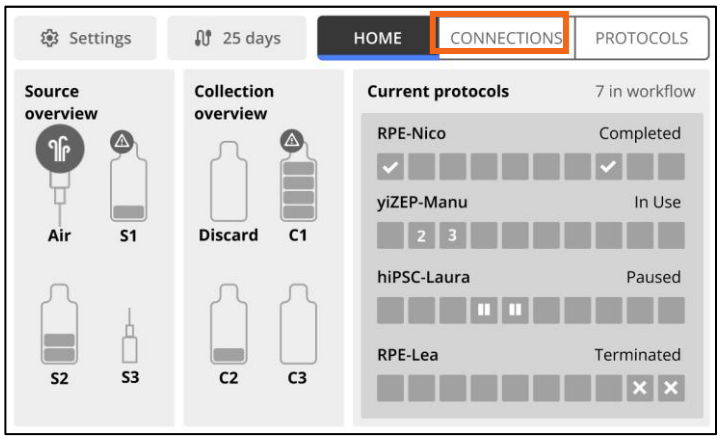


13. Once all connections have been completed, click on 'Back to Connections' button to close the procedure.

DOMINIQUE DUTSCHER SAS

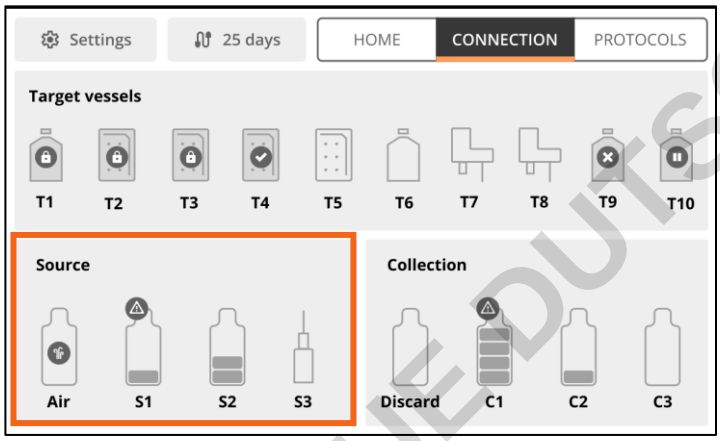
RECONNECTION SOURCE

This procedure lets you reconnect Source Bottles that has been temporarily disconnected.

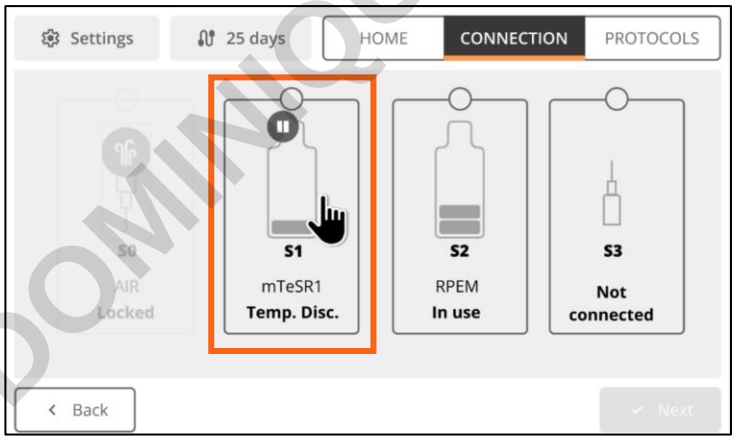


1. Bring your target equipped with a Source Bottle Adapter.

2. Click on the “Connection” button.



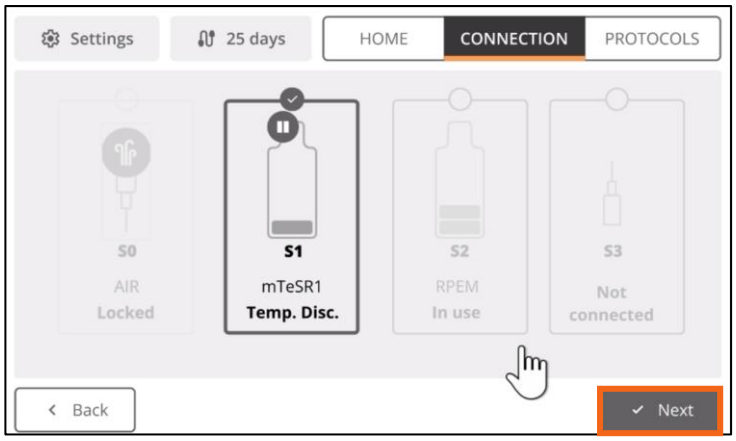
3. Click on the Source Bottles area.



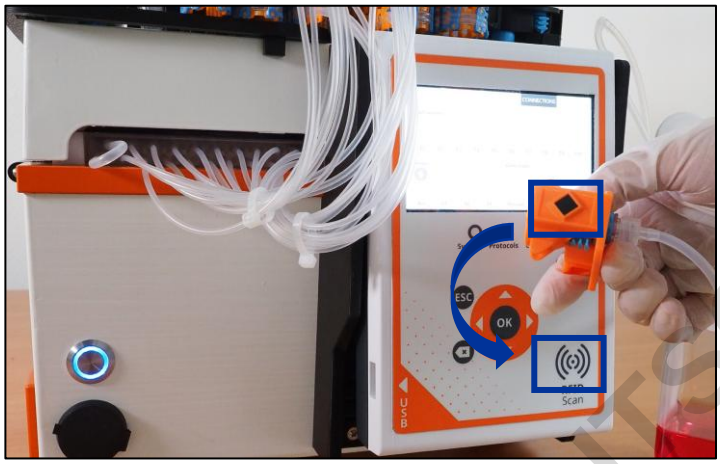
4. Click on the connectors of the lines where you want to reconnect your Source Bottles.

The lines available for a reconnection are shown with a disconnected connector and have the status “Temp. Disc.”

DOMINIQUE DUTSCHER SAS



5. Click on the “Next” button.



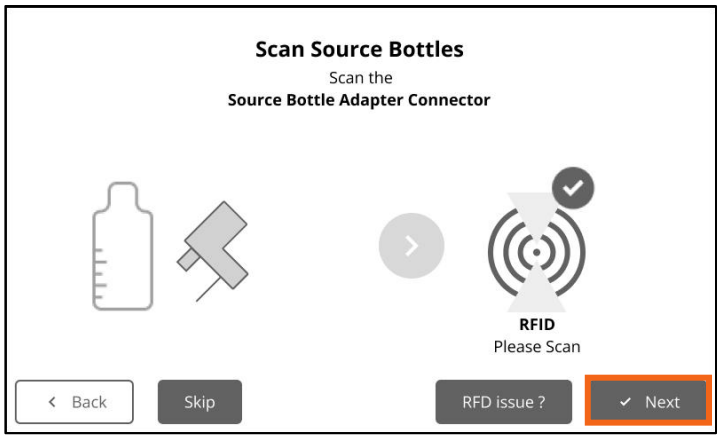


6. Place the RFID tag of the Source Bottle Adaptor Connector for the previously selected line on the RFID scanning area of the control panel.

An audible beep will confirm that the scan is successful.

In case of unsuccessful scan, please refer to the “RFID issue” procedure.

DOMINIQUE DUTSCHER SAS



7. Click on the “Next” button.



8. Place the RFID tag of the Tubing Set Connector for the previously selected line on the RFID scanning area of the control panel.

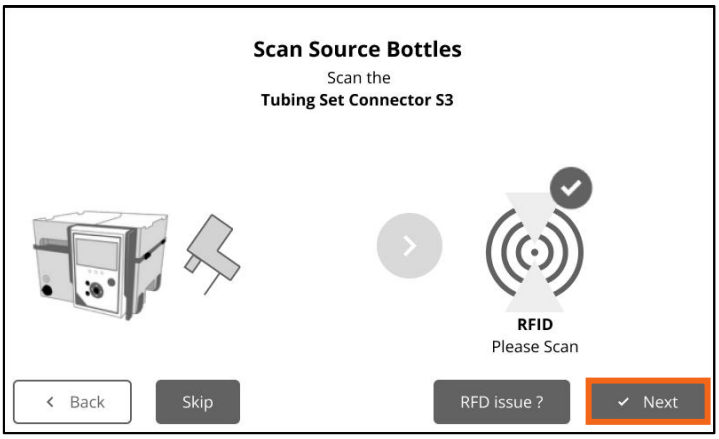
ℹ Source connectors are orange, and their number is indicated on the RFID tag.

ℹ An audible beep will confirm that the scan is successful.

⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



DOMINIQUE DUTSCHER SAS



9. Click on the “Next” button.

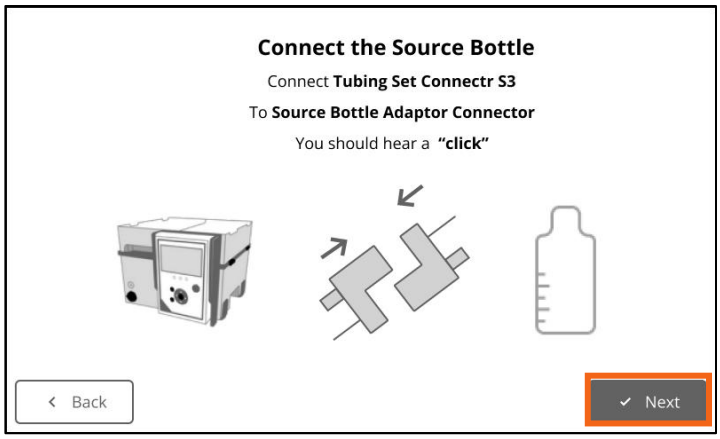


10. Connect the Source Bottle Adapter Connector to the Tubing Set Connector.

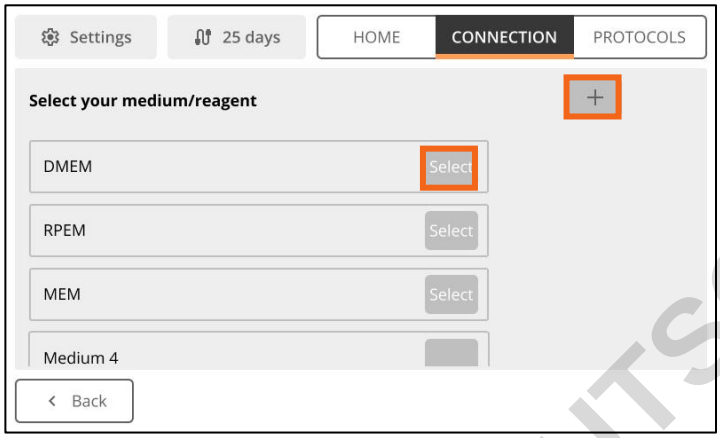
⚠ Caution: Ensure that you hear a ‘click’ when connecting. An incorrect connection may result in overpressure, causing the tubing channel to open and contaminate the entire fluidic circuit.



DOMINIQUE DUTSCHER SAS



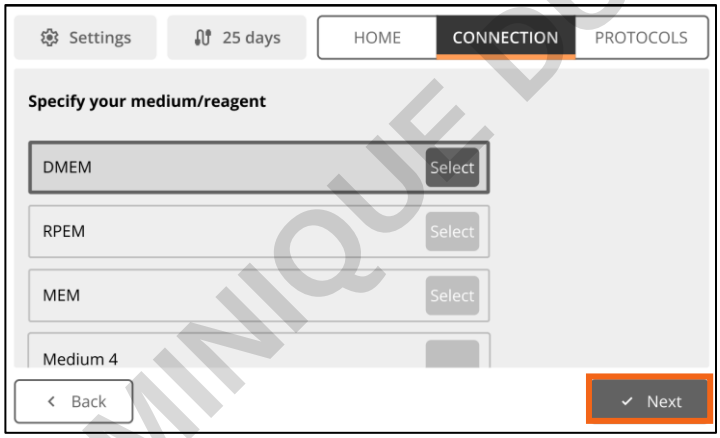
11. Click on the “Next” button.



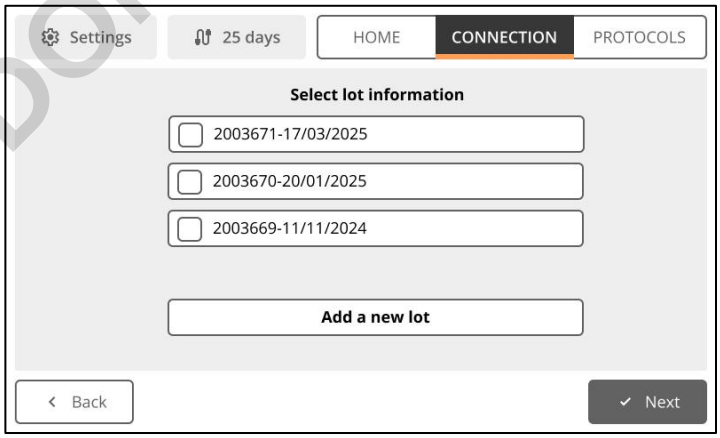
12. Select the culture medium associated with the connected Source by clicking on the “Select” button.

Scroll through the list by swiping up on the screen.

If the medium you want to connect is not in the list, click the ‘+’ button.



13. Click on the “Next” button.

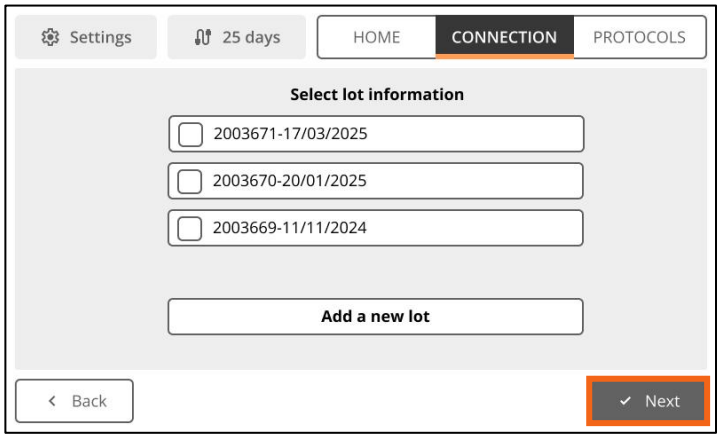


14. You must enter the lot number and expiry date of the source you want to connect.

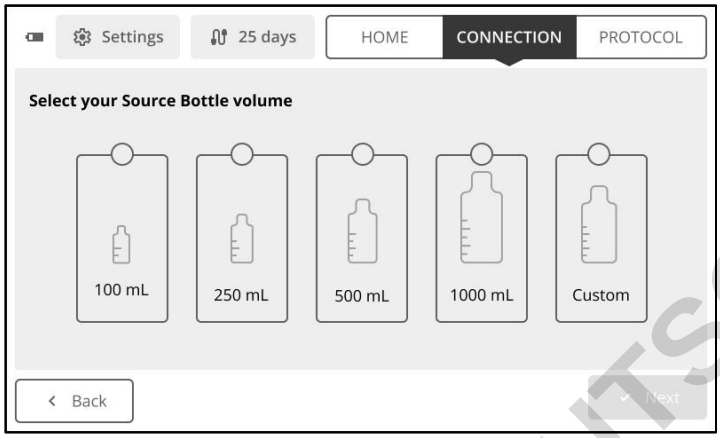
If this information has already been recorded, select it directly from the list provided.

If it does not appear, click on the area below the list to enter it manually.

DOMINIQUE DUTSCHER SAS



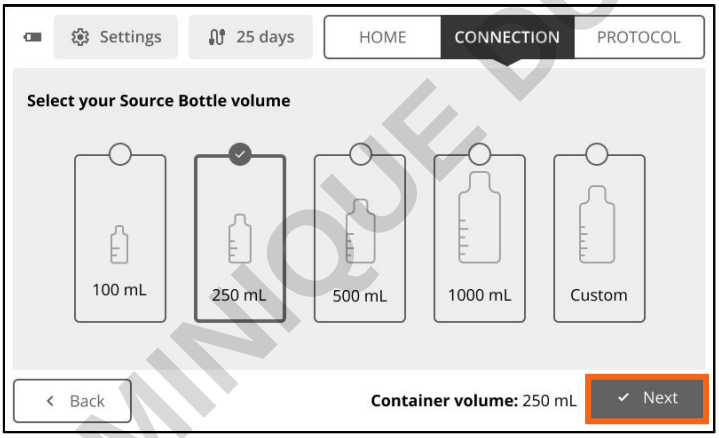
15. Click on the “Next” button.



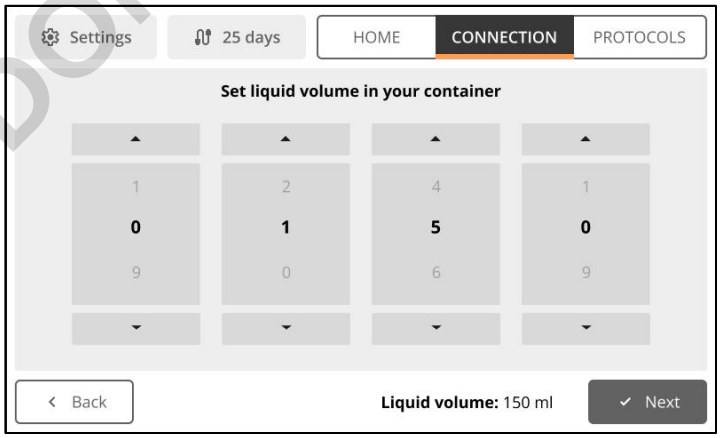
16. Select the volume of the container you have just connected to the Tubing Set.

ℹ It is also possible to use the “Custom” option to set an intermediate volume that is not listed.

ℹ The volume must be entered in millilitres (mL).



17. Click on the “Next” button.

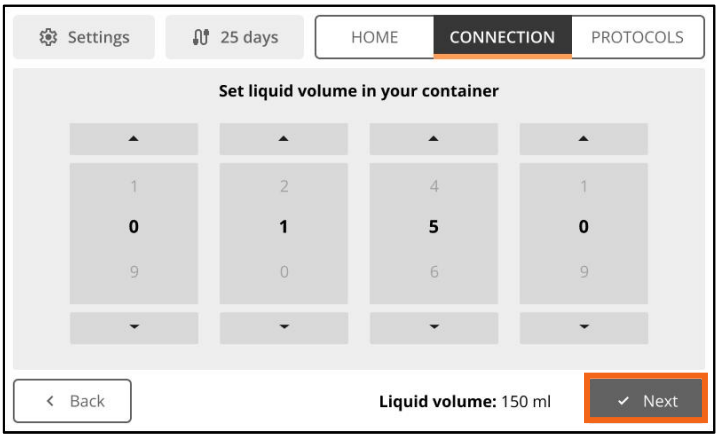


18. Use the arrows to select the Source volume.

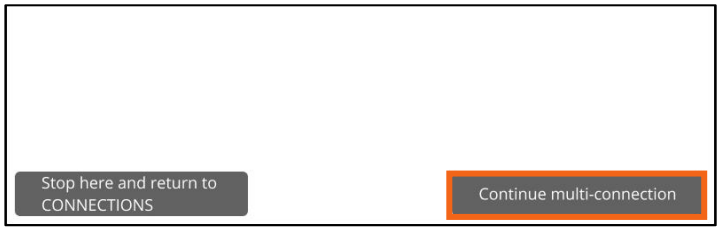
ℹ The volume must be entered in millilitres (mL).

ℹ A minimum volume of 5 mL must be added.

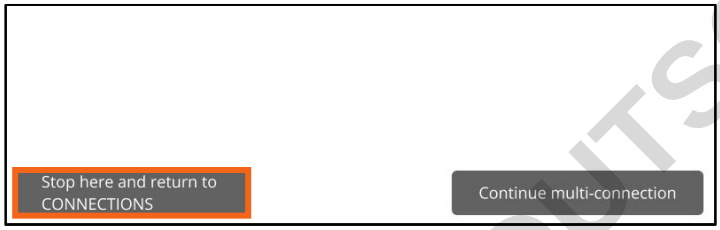
DOMINIQUE DUTSCHER SAS



19. Click on the “Next” button.



20. Click the ‘Continue multi-connection’ button to move on to the next connection.



ℹ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to connect a new Source Bottle.



21. Once all connections have been completed, click on ‘Back to Connections’ button to close the procedure.

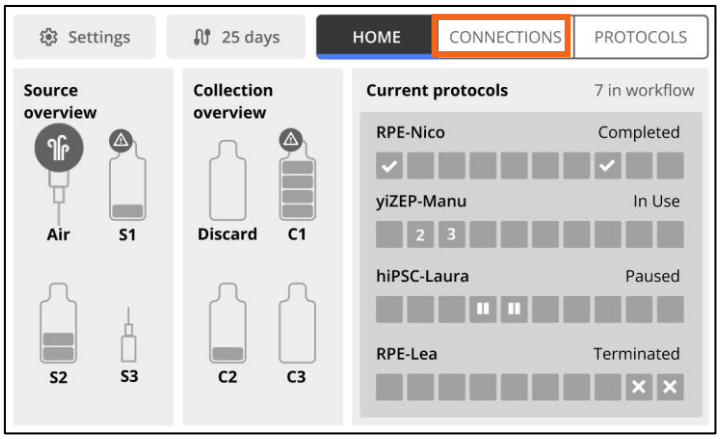
DOMINIQUE DUTSCHER SAS

Store the connected source in the Refrigeration Unit.

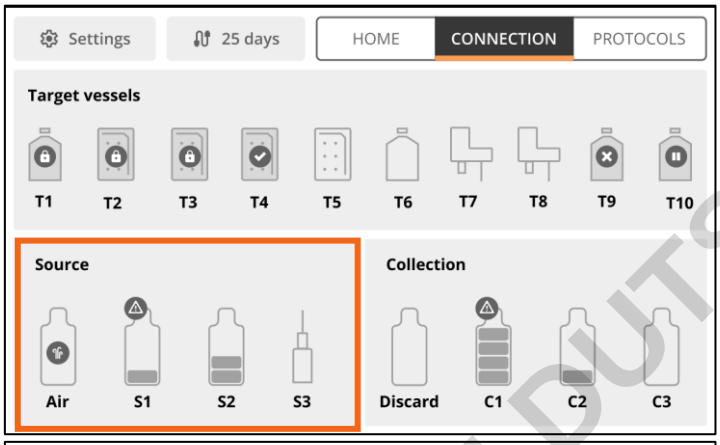
DOMINIQUE DUTSCHER SAS

PERMANENT DISCONNECTION SOURCE

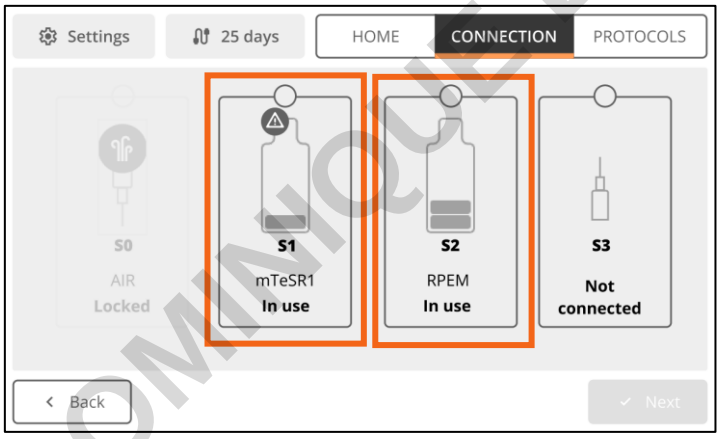
Use this procedure to permanently disconnect a source and release the line.



1. Click on the “Connection” button.



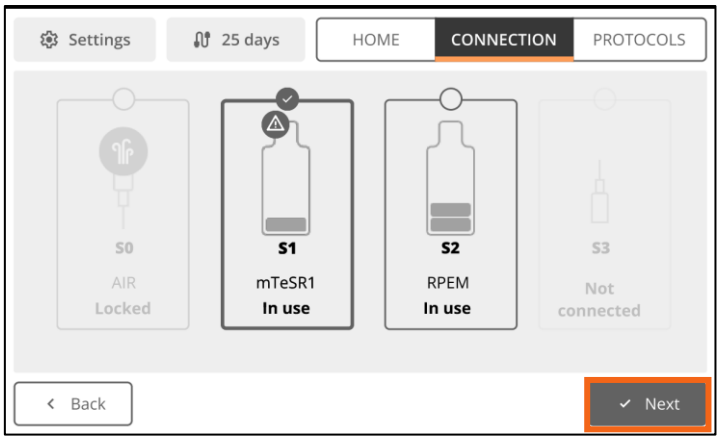
2. Click on the Source Bottles area.



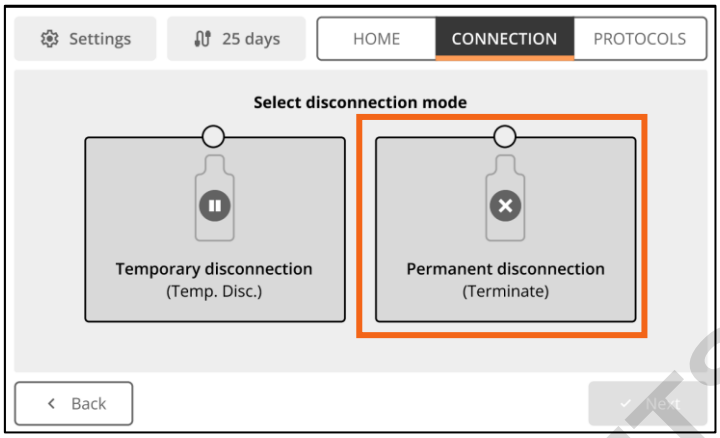
3. Click on the connectors of the lines where you want to disconnect your Source Bottles.

The lines available for this disconnection are shown with a disconnected connector and have the status “In use.” or “Connected”.

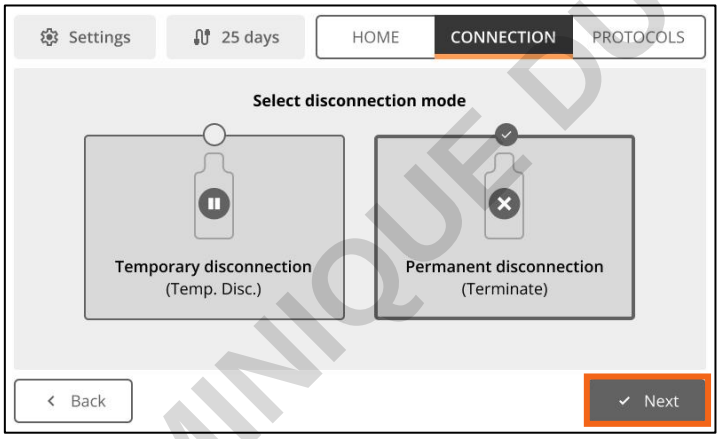
DOMINIQUE DUTSCHER SAS



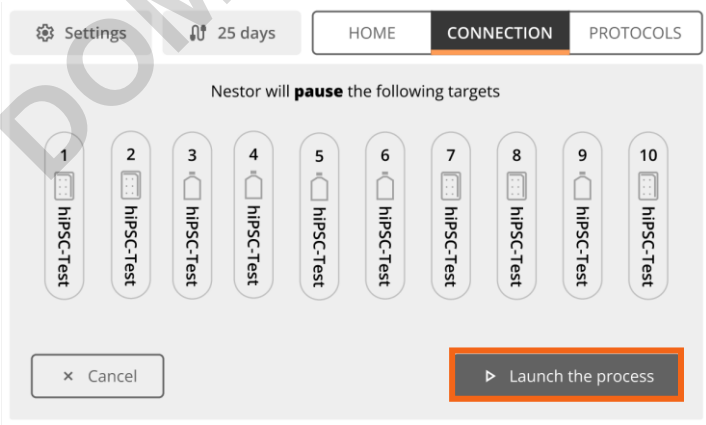
4. Click on the “Next” button.



5. Click on the “Permanent disconnection” button.



6. Click on the “Next” button.

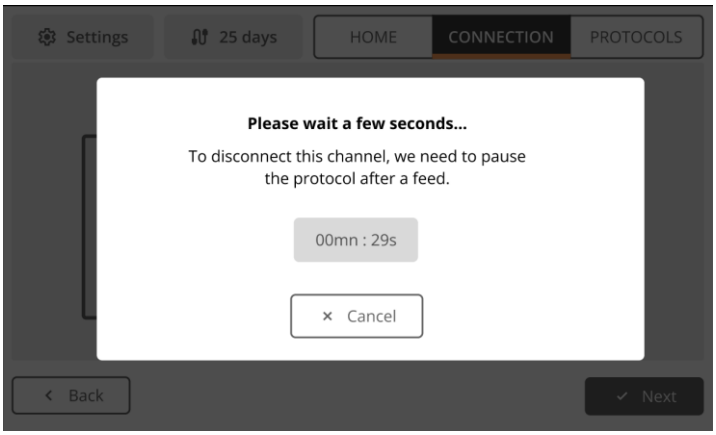


7. Nestor will inform you of the impact of this operation on the connected vessel targets.

Nestor will pause all affected protocols. To resume the protocols, you will need to follow the temporary disconnection and reconnection procedures for the Target.

Click on the ‘Launch the process’ button to start the procedure.

DOMINIQUE DUTSCHER SAS



To avoid losing the cultured cells, source disconnection is only available after the last medium addition.

8. Open the Refrigeration Unit cover and remove the bottles you want to disconnect.



9. Disconnect the Source Bottle Adapter Connector from the Tubing Set Connector.



DOMINIQUE DUTSCHER SAS

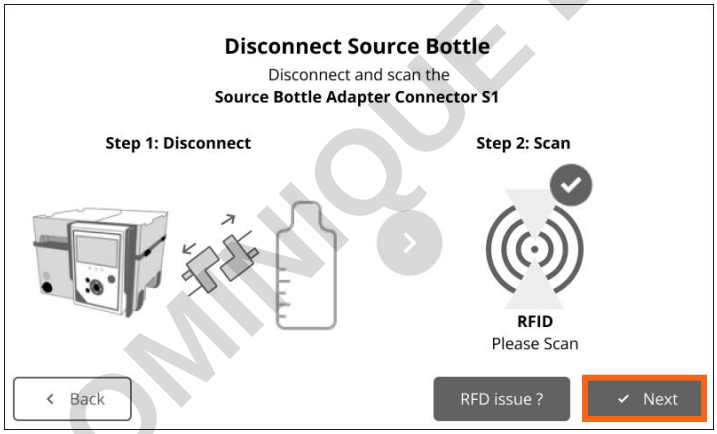


10. Place the RFID tag of the Tubing Set Adapter Connector on the RFID scanning area of the control panel.

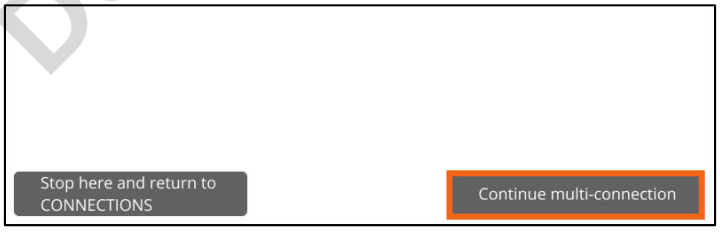
ℹ An audible beep will confirm that the scan is successful.

⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



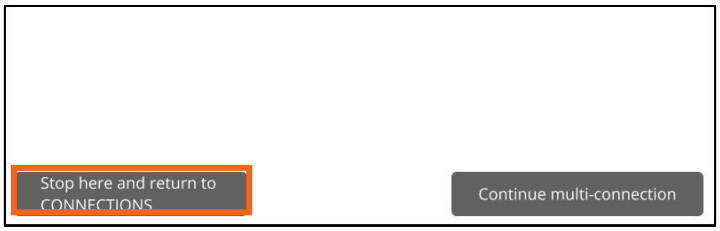


6. Click on the “Next” button.



7. Click the ‘Continue multi-disconnection’ button to move on to the next disconnection.

DOMINIQUE DUTSCHER SAS



ℹ Click the 'Stop here and return to CONNECTIONS' button if you do not want to connect a new Source Bottle.



11. Once all connections have been completed, click on 'Back to Connections' button to close the procedure.

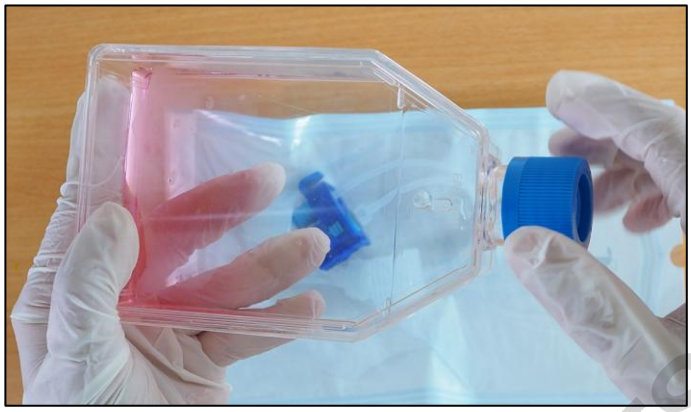
DOMINIQUE DUTSCHER SAS

CONNECTION TARGET

ADAPTATER CONNECTION

FLASK

⚠ The following procedure must be carried out under aseptic conditions inside a sterile hood.



1. Under the sterile hood, remove the flask cap.

   Discard the cap in the appropriate waste container.



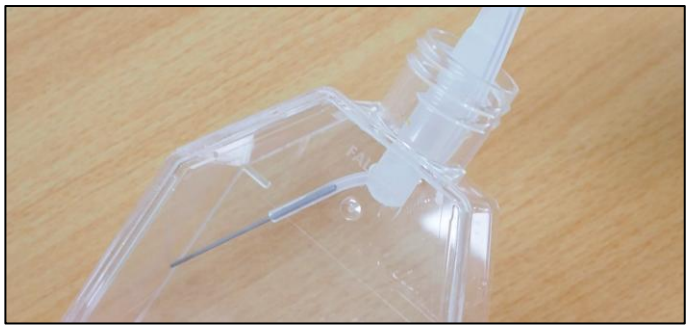
2. Remove the Flask Adapter from its sterile pouch.



3. For T175, and T225 flasks, screw the Extension Ring onto the flask neck until it reaches the stop.

   It must fully cover the neck of the flask.

DOMINIQUE DUTSCHER SAS

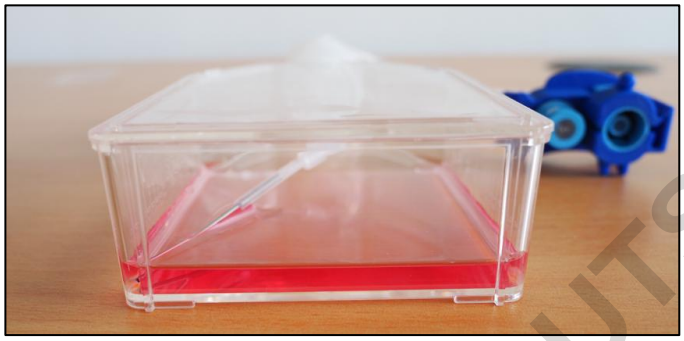


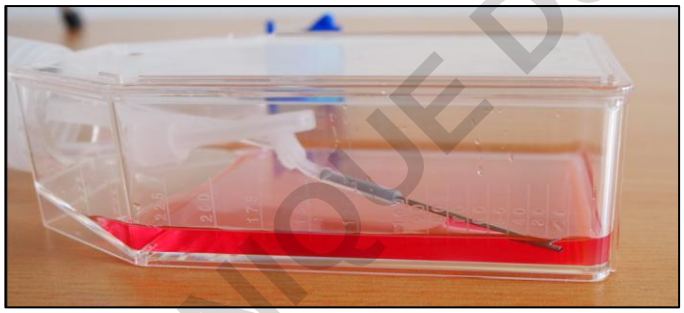
4. Hold the Adapter by its fins and insert the Adapter straw into the flask with the straw oriented toward the ceiling of the flask.

   ⚠ Caution : Take care not to touch the flask neck or the cell layer at the bottom.



5. Use the fins to position the sprinkler parallel to the cell layer, ensuring the straw reaches the bottom corner of the flask.







6. Hold the flask steady with one hand, use the fins to maintain the sprinkler and straw in position, and then screw the Adapter Ring onto the flask until it is firmly secured.

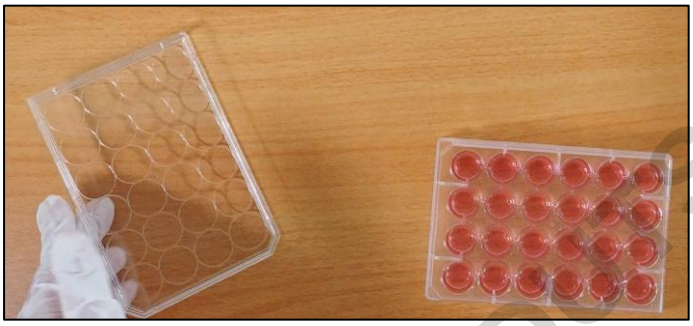
Thanks to the sterile connector, the flask is now ready to be safely used outside the sterile hood without risk of contamination.

DOMINIQUE DUTSCHER SAS

⚠ The following procedure must be carried out under aseptic conditions inside a sterile hood.



1. Remove the Plate Adapter from its sterile pouch.



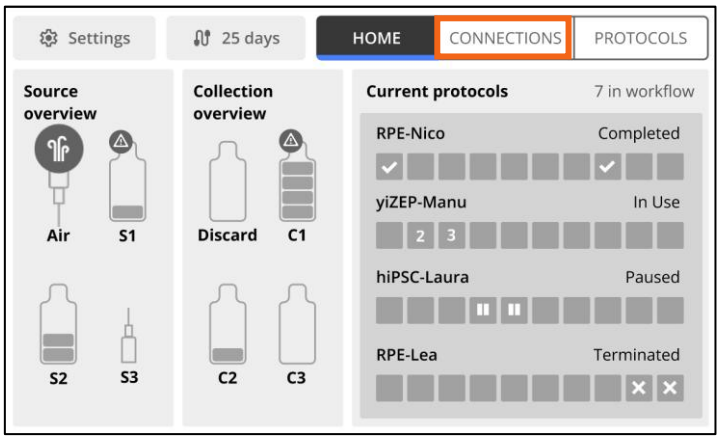
2. Remove the standard lid from the plate.



3. Place the Plate Adapter onto the plate.

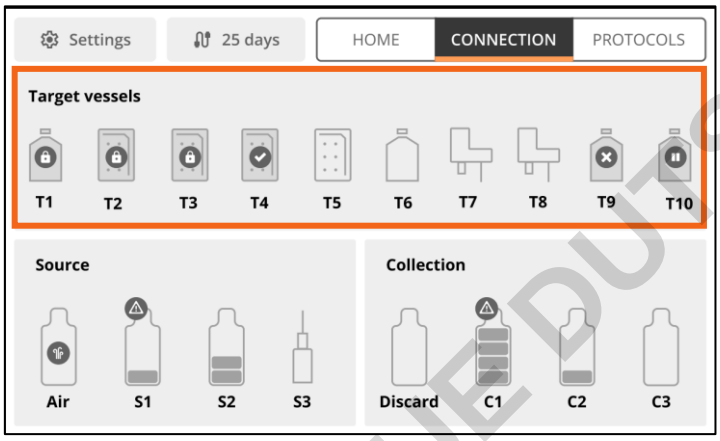
Thanks to the sterile connector, the plate is now ready to be safely used outside the sterile hood without risk of contamination.

DOMINIQUE DUTSCHER SAS

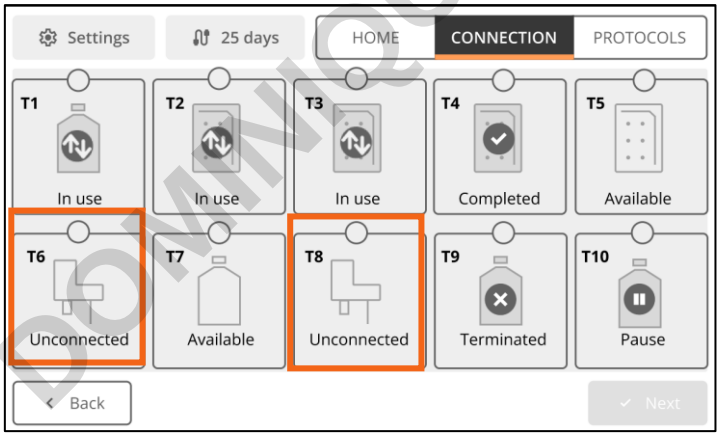


1. Bring your Target Vessel equipped with a Flask Adapter or a Plate Adapter.

2. Click on the “Connection” button.



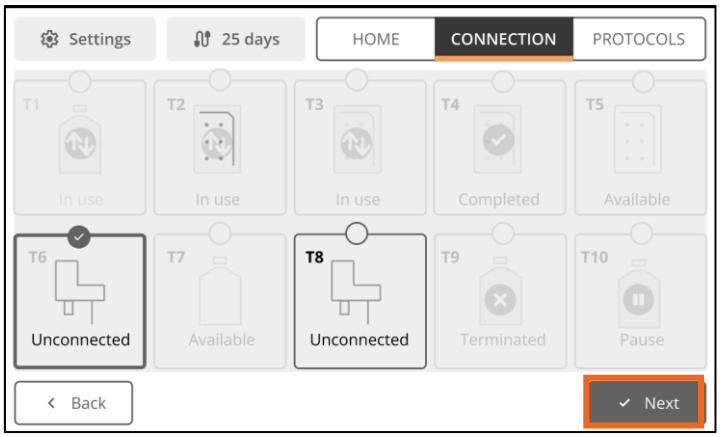
3. Click on the Target Vessels area.



4. Click on the connectors of the lines where you want to connect your Flask or Plate.

The lines available for a new target connection are shown with a disconnected connector and have the status “Unconnected.”

DOMINIQUE DUTSCHER SAS



5. Click on the ‘Next’ button.



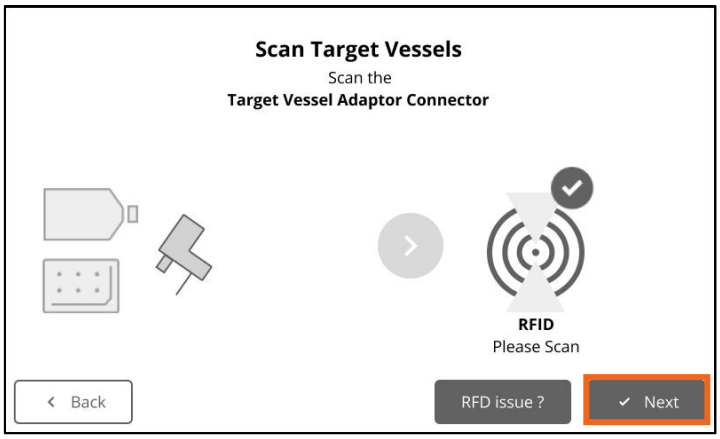
6. Place the RFID tag of the Target Vessel Connector on the RFID scanning area of the control panel.

ℹ An audible beep will confirm that the scan is successful.

✕ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



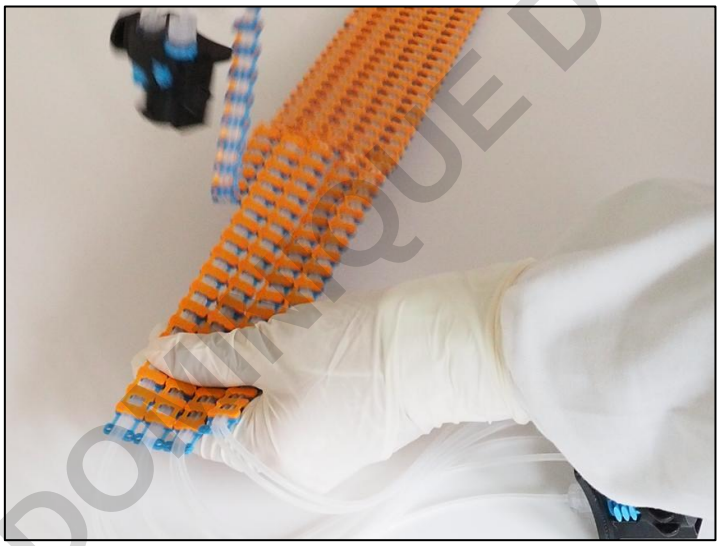
DOMINIQUE DUTSCHER SAS



7. Click on the “Next” button.

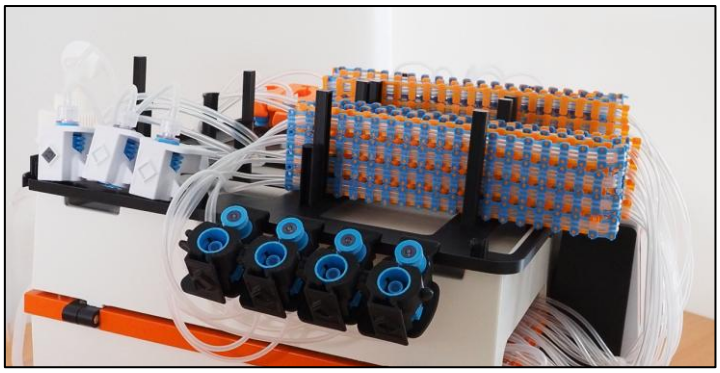


8. Detach one of the connectors from the Tubing Set Mounting Plate.



9. Separate the Tube Shield from the Tube Shields Strip.

DOMINIQUE DUTSCHER SAS



10. Store the Tube Shields Strip and the remaining connectors.



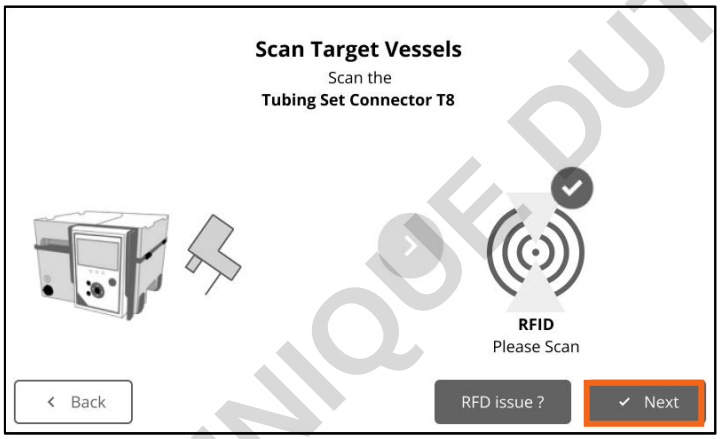
11. Place the RFID tag of the Tubing Set Connector for the previously selected line on the RFID scanning area of the control panel.

ℹ Target connectors are blue, and their number is indicated on the RFID tag.

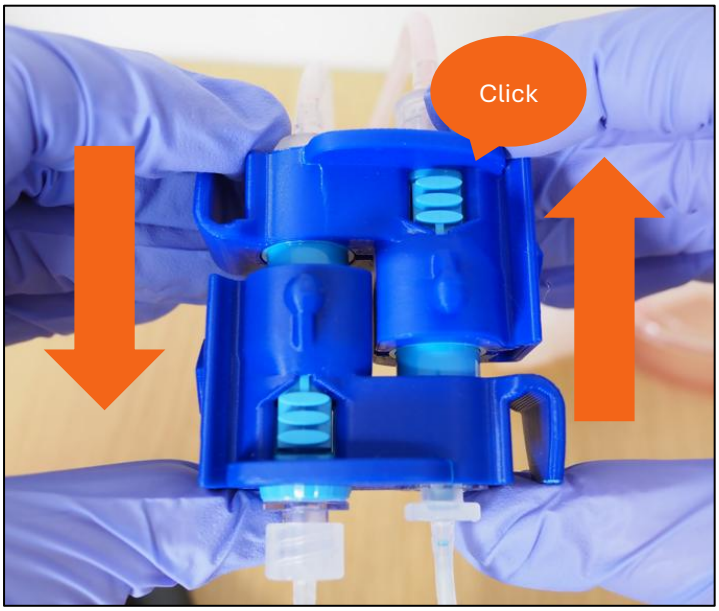
ℹ An audible beep will confirm that the scan is successful.

✕ In case of unsuccessful scan, please refer to the “RFID issue” procedure.

12. Click on the “Next” button.



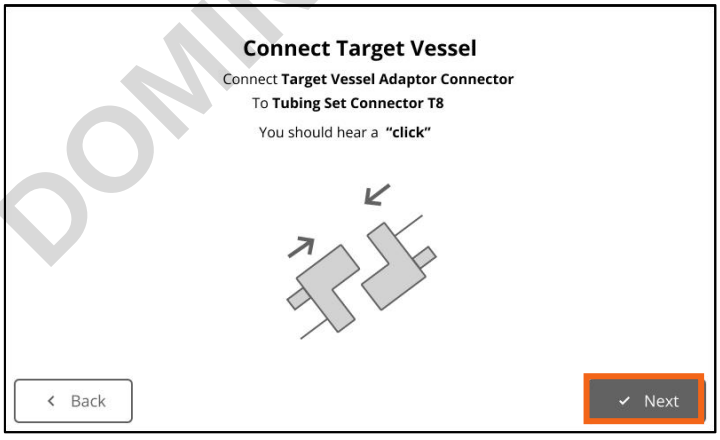
DOMINIQUE DUTSCHER SAS





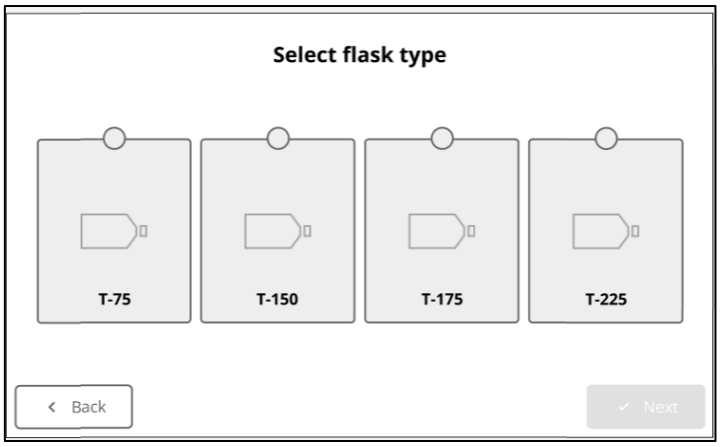
13. Connect the Adapter Connector to the Tubing Set Connector.

⚠ Caution: Ensure that you hear a ‘click’ when connecting. An incorrect connection may result in overpressure, causing the tubing channel to open and contaminate the entire fluidic circuit.

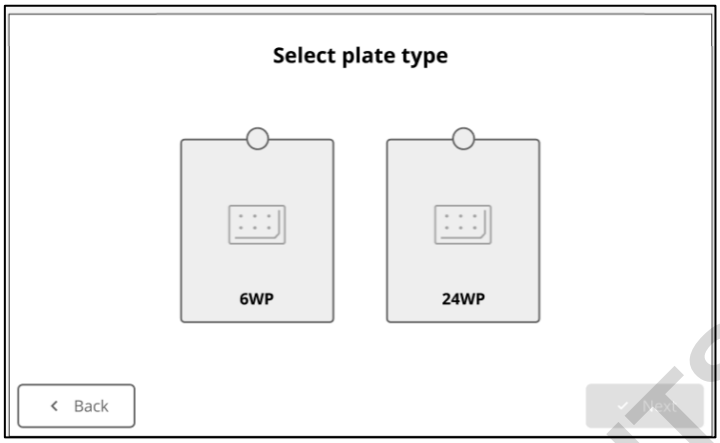


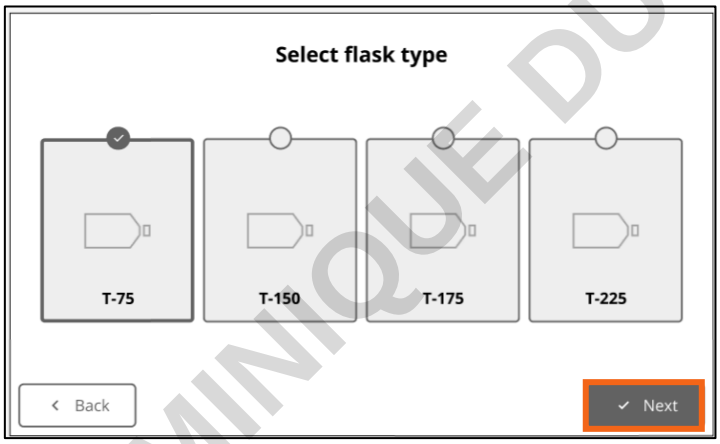
14. Click on the “Next” button.

DOMINIQUE DUTSCHER SAS



15. Select the type of flask or plate you have just connected to the tubing set by clicking on the corresponding button.





16. Click on the “Next” button.

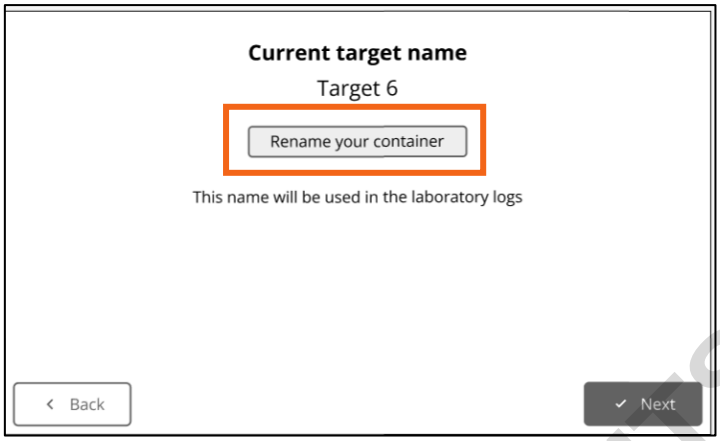


17. If the target you are connecting is a plate, you must select its brand.

DOMINIQUE DUTSCHER SAS

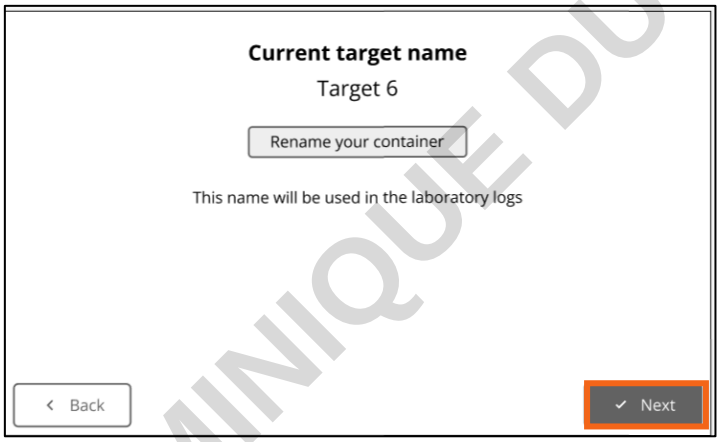


18. Click on the “Next” button.

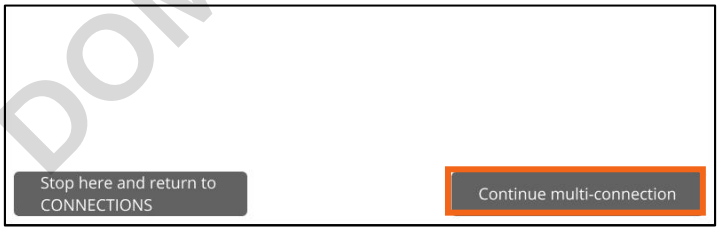


19. The target will automatically be named “Channel X” by Nestor, where X corresponds to the channel number.

If you want to give the target a custom name, click the “Rename your container” button.

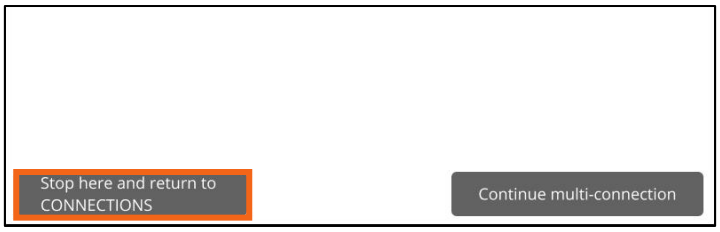


20. Click on the “Next” button.



21. Click the ‘Continue multi-connection’ button to move on to the next connection.

DOMINIQUE DUTSCHER SAS

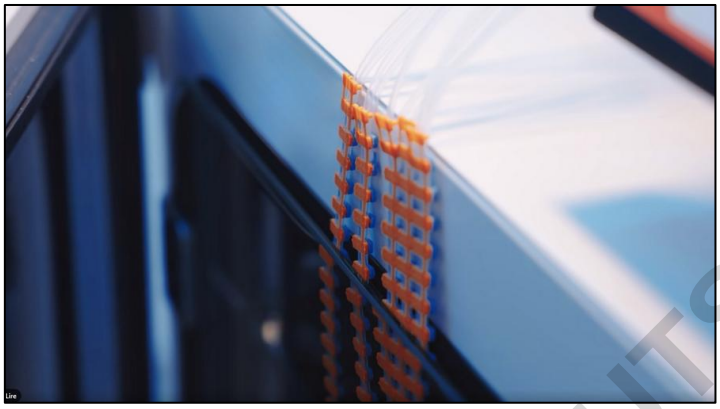


ℹ Click the 'Stop here and return to CONNECTIONS' button if you do not want to connect a new source.



22. Once all connections have been completed, click on 'Back to Connections' button to close the procedure.

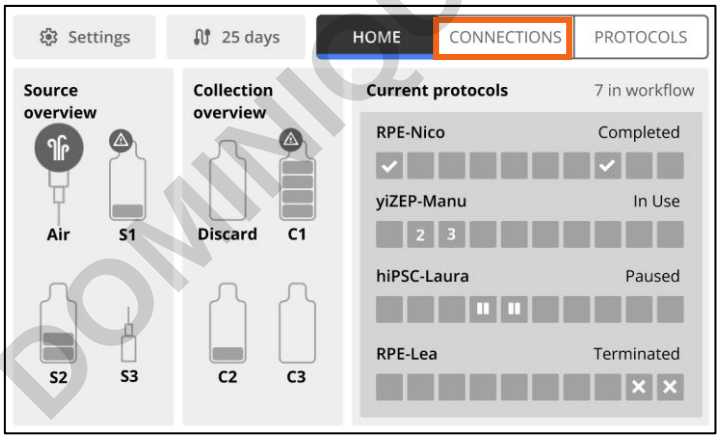
23. Place your Target Vessels in your incubator.



24. Close the door of your incubator over the Tube Shields of the Tubing Set.

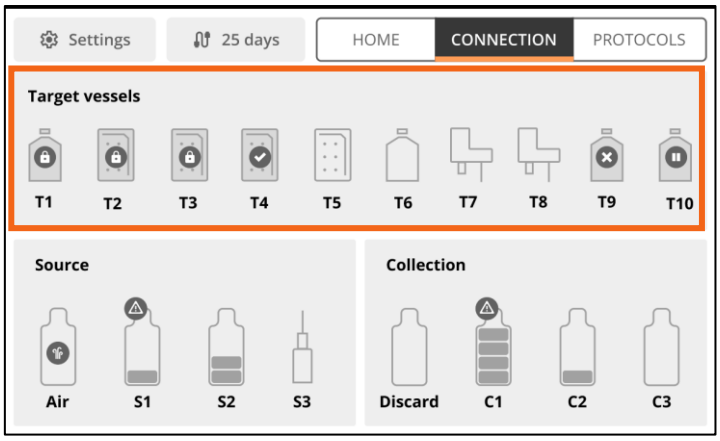
TEMPORARY DISCONNECTION TARGET

Use this procedure to perform a manual action on a target while pausing the line it is connected to.

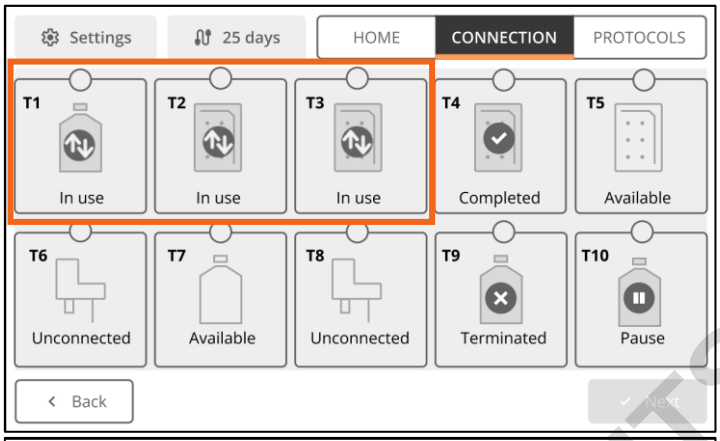


1. Click on the "Connection" button.

DOMINIQUE DUTSCHER SAS



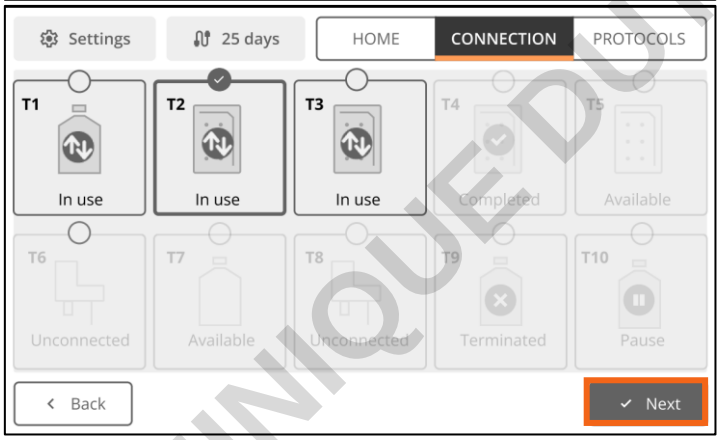
2. Click on the Target Vessels area.



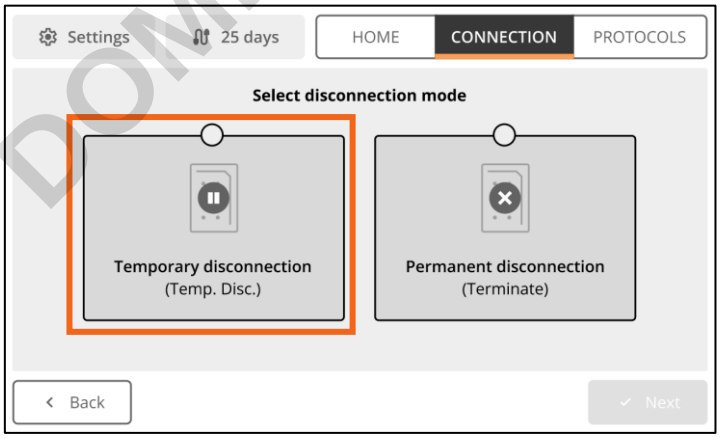
3. Click on the connectors of the channels from which you want to disconnect your flasks or plates.

The lines available for this disconnection are shown with a flask or a plate and have the status “In use.”

ℹ You can only select targets of the same type (flask or plate) and size at the same time.

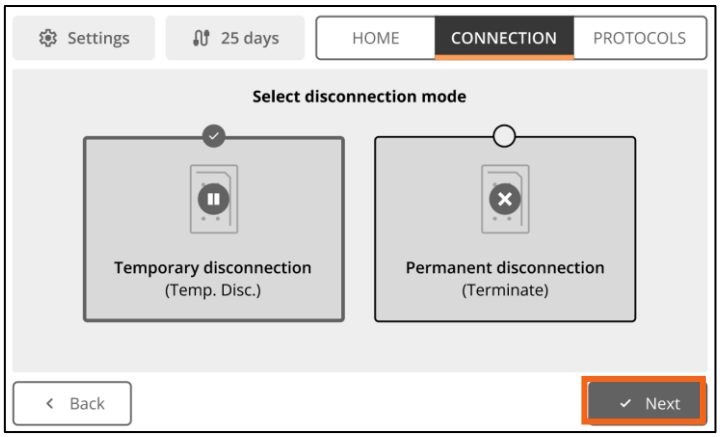


4. Click on the “Next” button.

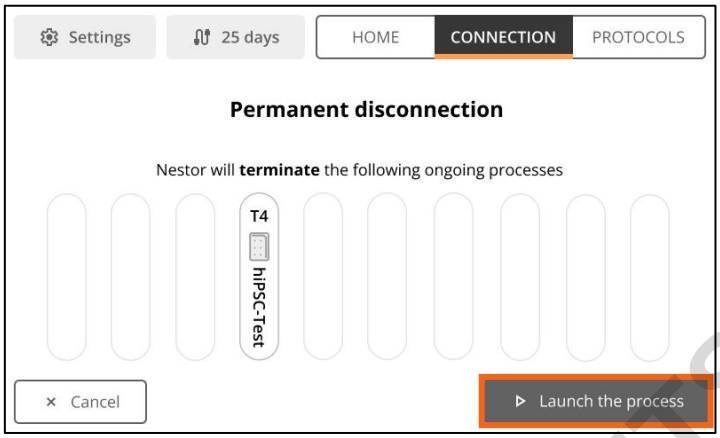


5. Click on the “Temporary disconnection” button

DOMINIQUE DUTSCHER SAS



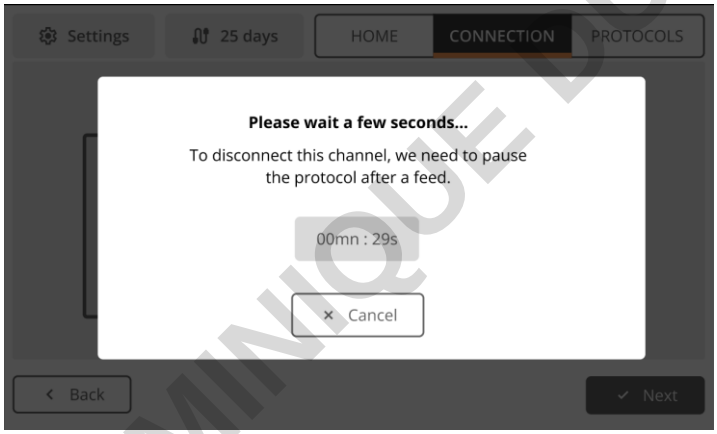
6. Click on the “Next” button.



7. Nestor will inform you of the impact of this operation on the connected flasks or plates.

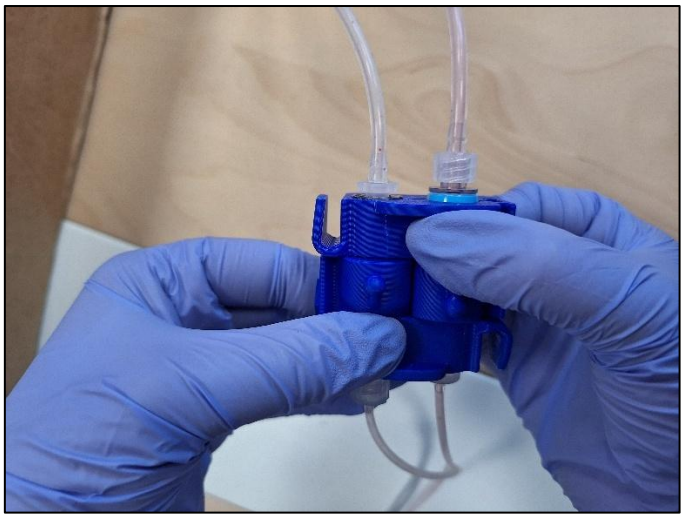
Nestor will pause the protocol on the affected lines and will resume it once the Targets are reconnected.

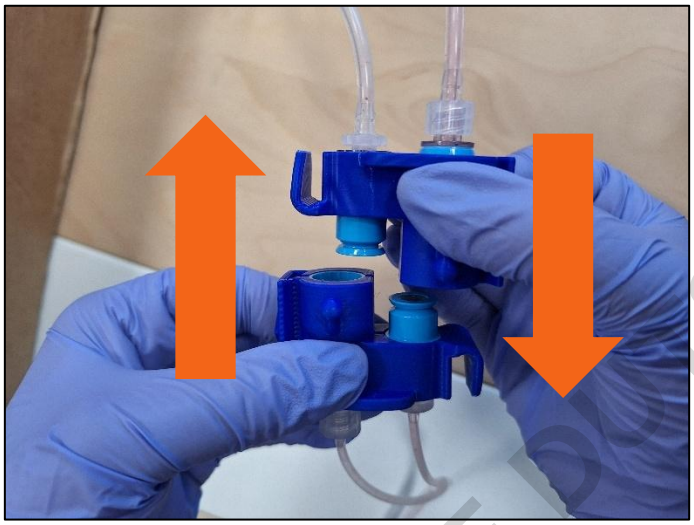
Click on the “Launch the process” button to start the operation.



To avoid losing the cultured cells, source disconnection is only available after the last medium addition.

DOMINIQUE DUTSCHER SAS







8. Disconnect the Target Adapter Connector from the Tubing Set Adapter Connector of the affected channel.

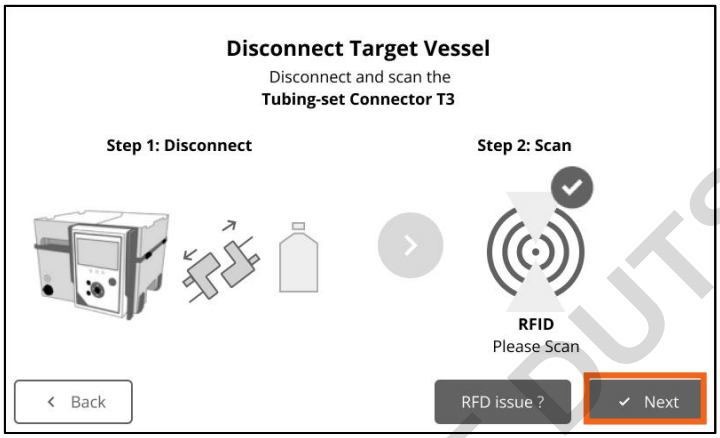
9. Place the RFID tag of the Tubing Set Adapter Connector on the RFID scanning area of the control panel.

ⓘ An audible beep will confirm that the scan is successful.

⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.

DOMINIQUE DUTSCHER SAS

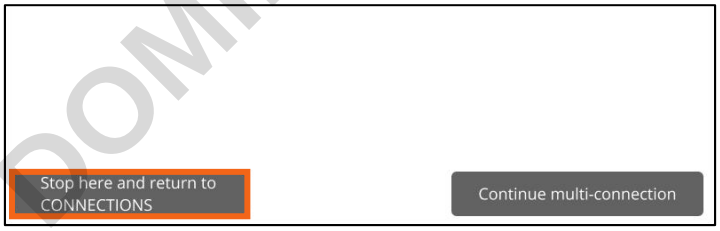




10. Click on the “Next” button.



11. Click the ‘Continue multi-disconnection’ button to move on to the next disconnection.



ℹ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to connect a new source.



Once all connections have been completed, click on ‘Back to Connections’ button to close the procedure.

ℹ Caution : the lines you have just paused are no longer being supplied by Nestor.

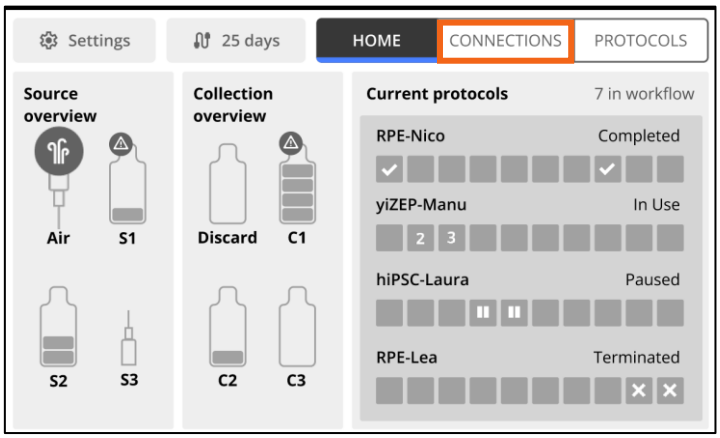
DOMINIQUE DUTSCHER SAS

Make sure to launch the reconnection procedure if you wish to resume the protocol, or the final disconnection procedure if you decide to stop the experiment on this target while continuing with the others.

DOMINIQUE DUTSCHER SAS

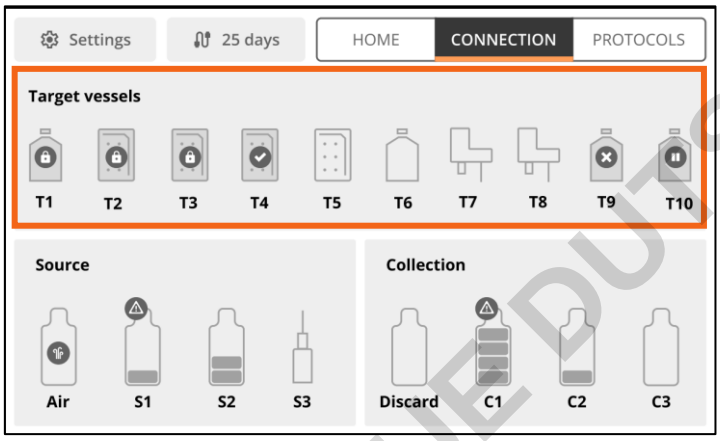
RECONNECTION TARGET

This procedure allows you to reconnect a target that was temporarily disconnected.

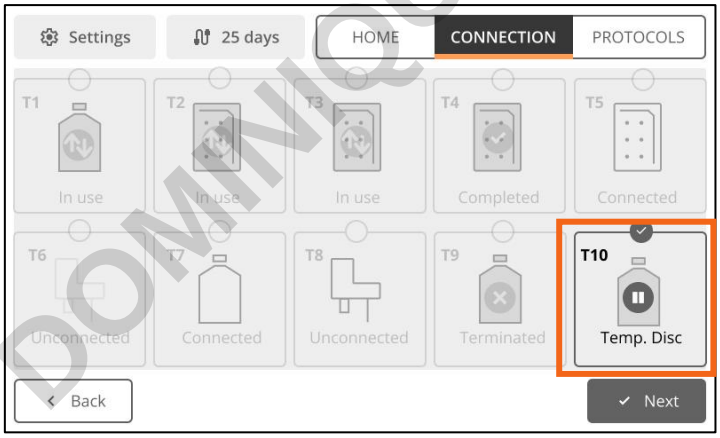


1. Bring your Target Vessel equipped with a Flask Adapter or a Plate Adapter.

2. Click on the “Connection” button.



3. Click on the Target Vessels area.



4. Click on the connectors of the lines where you want to connect your Flask or Plate.

ℹ The lines available for a reconnection are shown with a disconnected connector and have the status “Temp Disc.”

DOMINIQUE DUTSCHER SAS



5. Click on the ‘Next’ button.



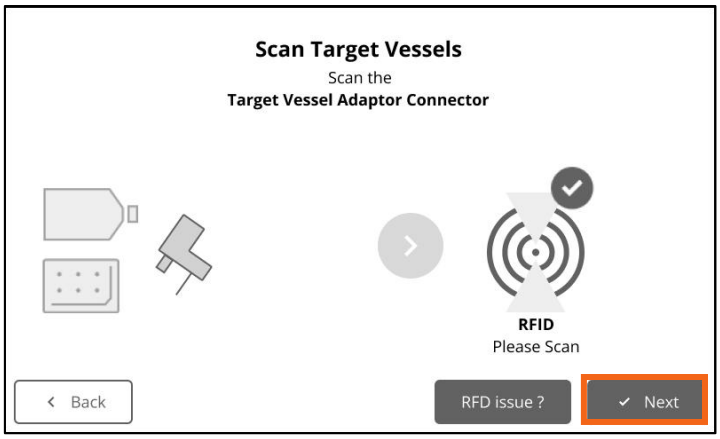
6. Place the RFID tag of the Target Vessel Connector on the RFID scanning area of the control panel.



ℹ An audible beep will confirm that the scan is successful.

✕ In case of unsuccessful scan, please refer to the “RFID issue” procedure.

DOMINIQUE DUTSCHER SAS



7. Click on the “Next” button.



8. Place the RFID tag of the Tubing Set Connector for the previously selected line on the RFID scanning area of the control panel.

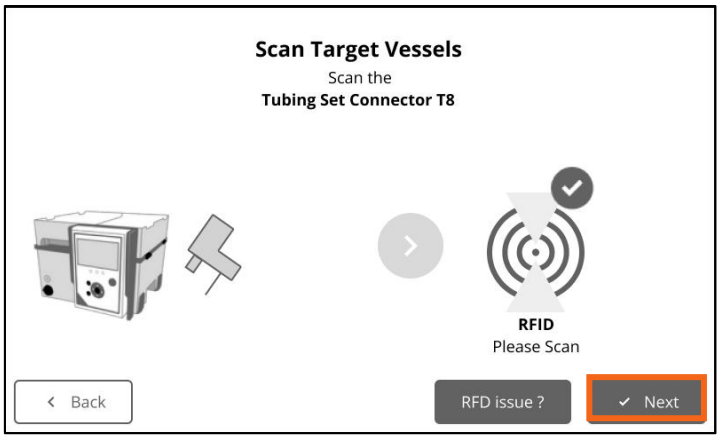
ℹ Source connectors are blue, and their number is indicated on the RFID tag.

ℹ An audible beep will confirm that the scan is successful.

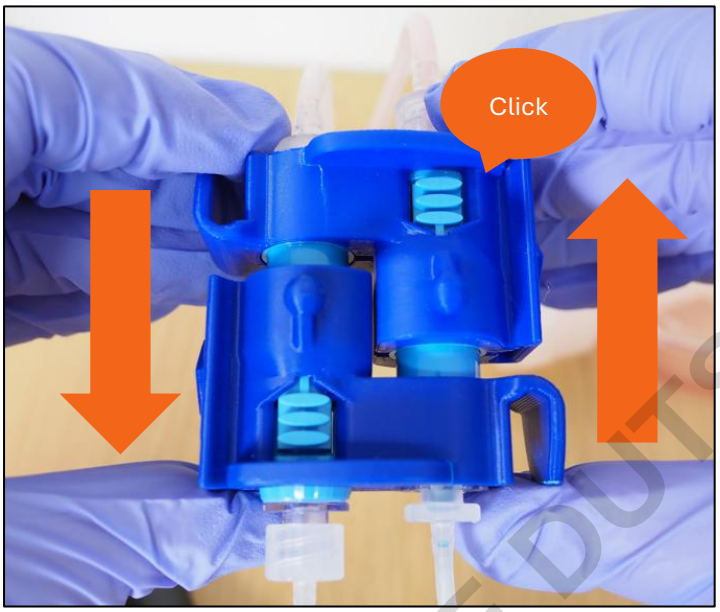
✕ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



DOMINIQUE DUTSCHER SAS



9. Click on the “Next” button.

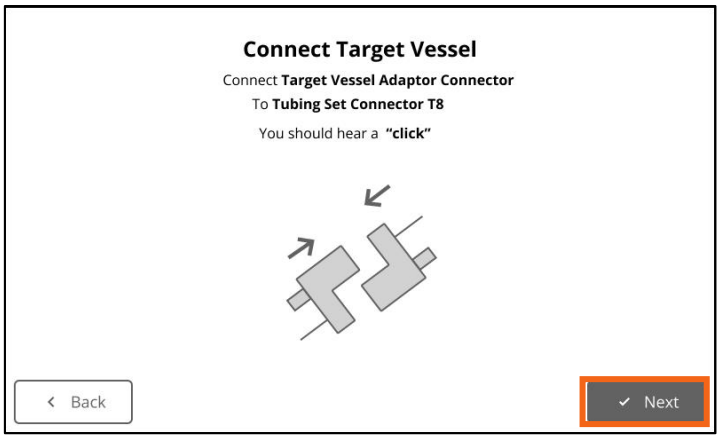


10. Connect the Adapter Connector to the Tubing Set Connector.

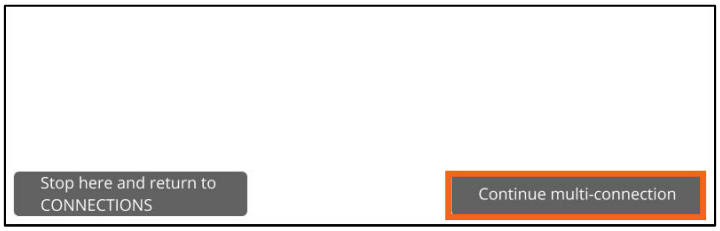
⚠ Caution: Ensure that you hear a ‘click’ when connecting. An incorrect connection may result in overpressure, causing the tubing channel to open and contaminate the entire fluidic circuit.



DOMINIQUE DUTSCHER SAS

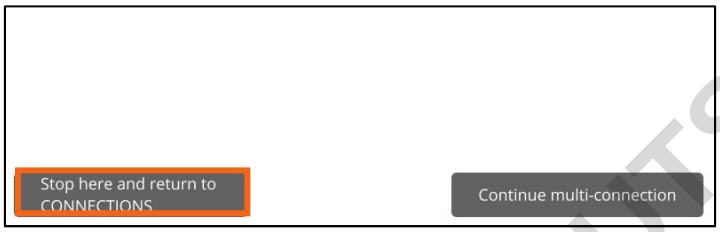


11. Click on the “Next” button.



12. Click the ‘Continue multi-connection’ button to move on to the next connection.

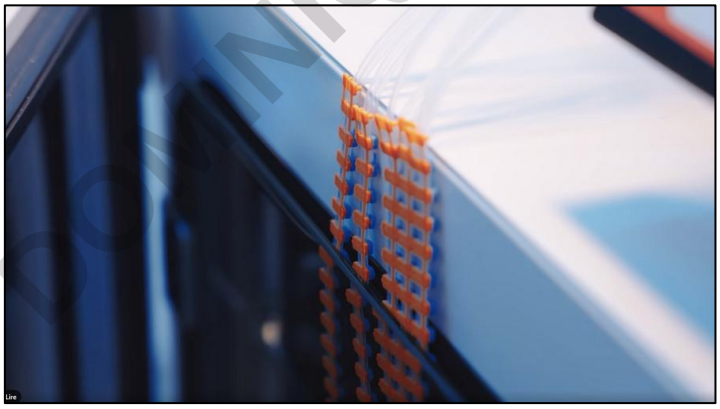
ℹ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to connect a new source.





13. Once all connections have been completed, click on ‘Back to Connections’ button to close the procedure.

14. Place your Target Vessels in your incubator.

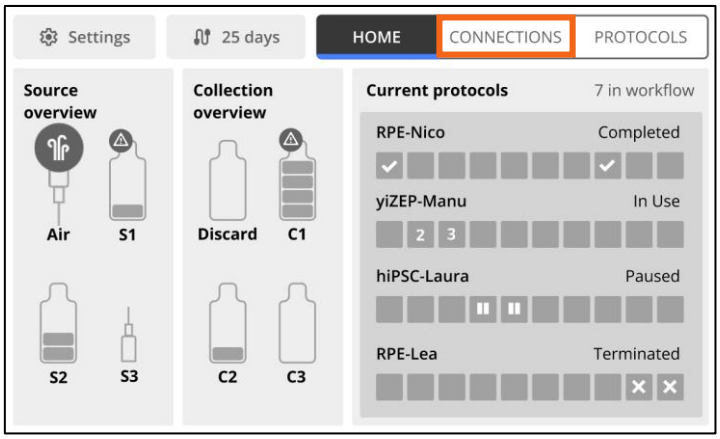


15. Close the door of your incubator over the Tube Shields of the Tubing Set.

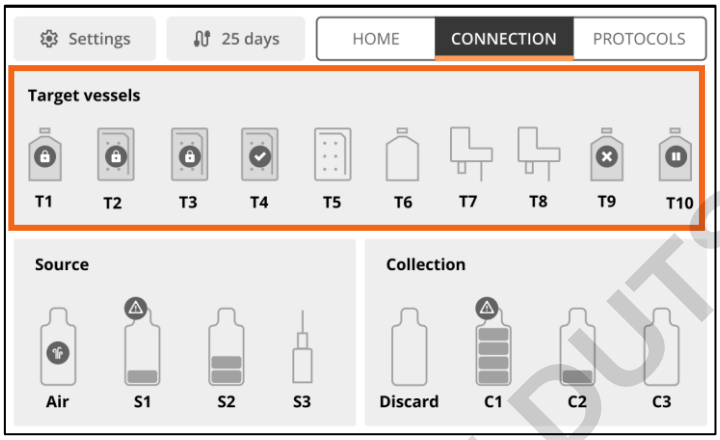
DOMINIQUE DUTSCHER SAS

PERMANENT DISCONNECTION TARGET

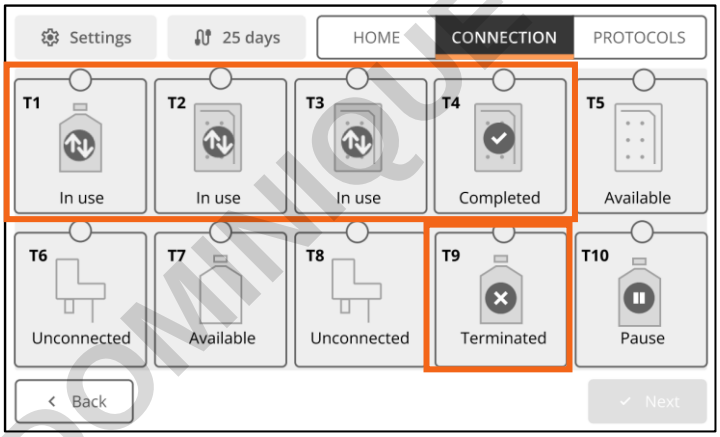
Use this procedure to permanently disconnect a target and release the line.



1. Click on the “Connection” button.



2. Click on the Target Vessels area.



3. Click on the connectors of the channels from which you want to disconnect your flasks or plates.

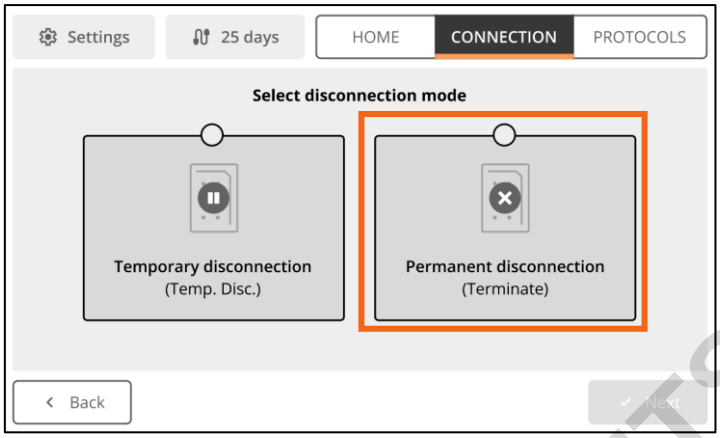
The lines available for this disconnection are shown with a flask or plate and have the status « In use », « Connected, « Completed » or « Terminated ».

ℹ You can only select targets of the same type (flask or plate) and size at the same time.

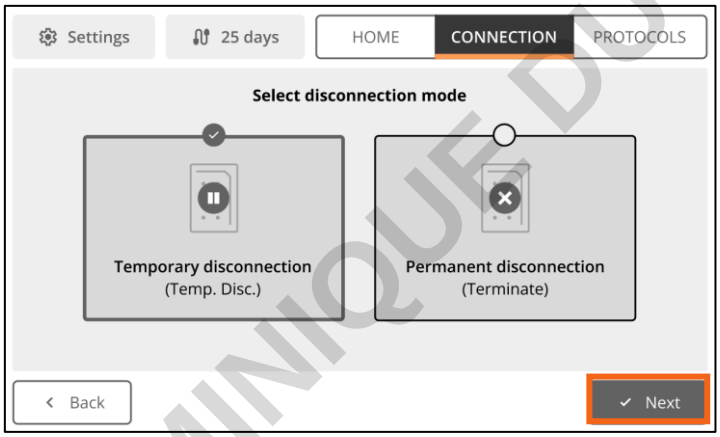
DOMINIQUE DUTSCHER SAS



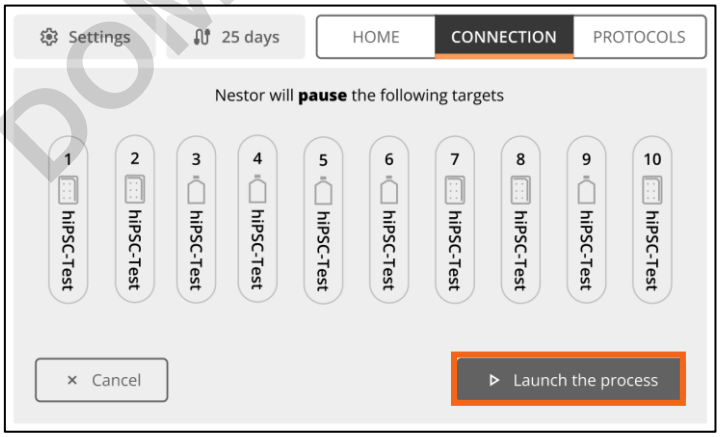
4. Cliquer sur le bouton « Next »



5. Click on the “Permanent disconnection” button.



6. Click on the “Next” button.

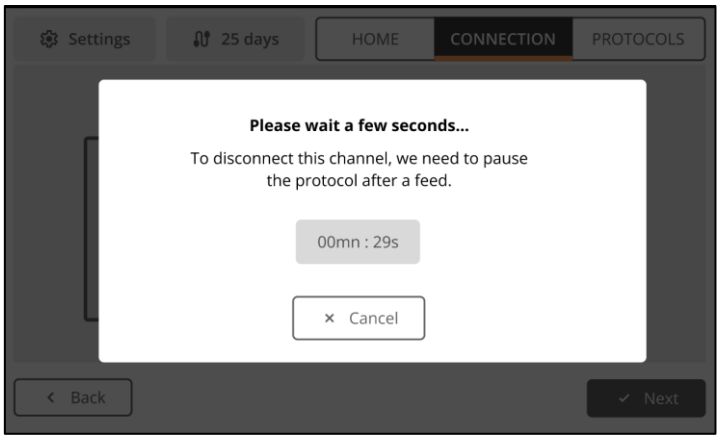


7. Nestor will inform you of the impact of this operation on the connected flasks or plates.

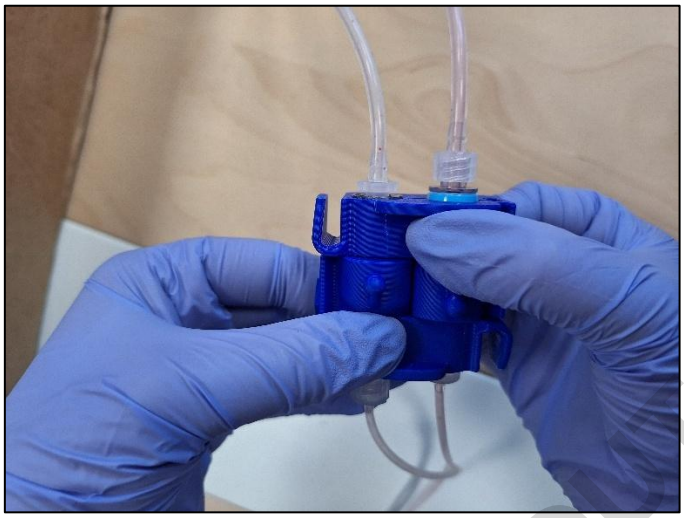
⚠ Caution: Nestor will terminate the protocol on the affected lines.

Click on the “Launch the process” button to start the operation.

DOMINIQUE DUTSCHER SAS



To avoid losing the cultured cells, source disconnection is only available after the last medium addition.



8. Disconnect the Target Adapter Connector from the Tubing Set Adapter Connector of the affected channel.



DOMINIQUE DUTSCHER SAS

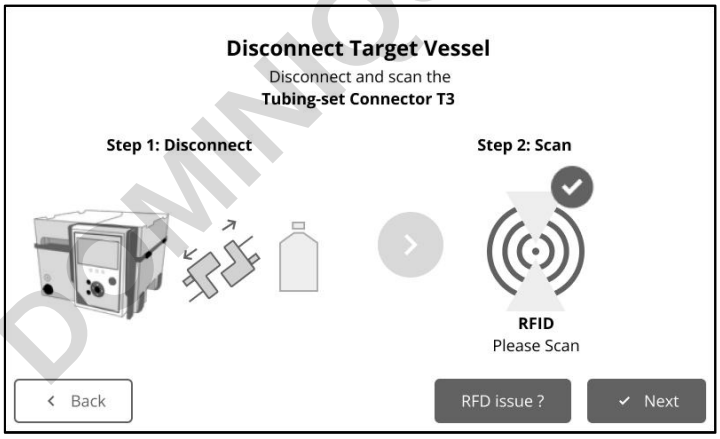


9. Place the RFID tag of the Tubing Set Adapter Connector on the RFID scanning area of the control panel.

ⓘ An audible beep will confirm that the scan is successful.

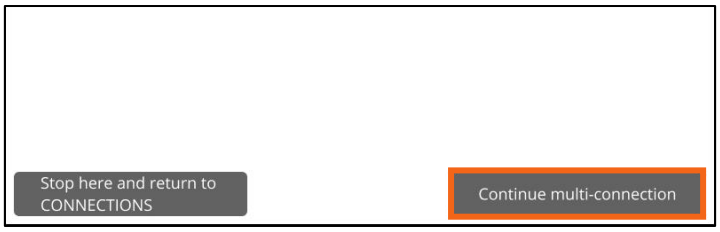
⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.

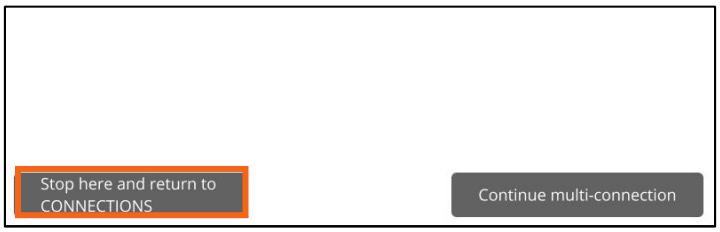




10. Click on the “Next” button.

DOMINIQUE DUTSCHER SAS





11. Click the 'Continue multi-disconnection' button to move on to the next disconnection.

ℹ Click the 'Stop here and return to CONNECTIONS' button if you do not want to connect a new source.

ℹ Caution: the lines you have just paused are no longer being supplied by Nestor.

DOMINIQUE DUTSCHER SAS

CONNECTION & DISCONNECTION COLLECTION

ADAPTER CONNECTION

ℹ The provided glass bottle must always be connected to line C0 to serve as the discard.

⚠ The following procedure must be carried out under aseptic conditions inside a hood, except for the discard bottle.



1. Under the sterile hood, remove the cap of the Collection Bottle.



2. Remove the Collection Bottle Adapter from its sterile pouch.

DOMINIQUE DUTSCHER SAS



3. For GL38 bottles, simply screw the Adapter Ring onto the bottle neck until it is firmly secured.

   It must fully cover the neck of the source bottle.



For GL45 bottles, remove the adapter Ring before screwing the Collection Bottle Adapter directly onto the bottle neck.

Thanks to the sterile connector, the bottle is now ready to be safely used outside the sterile hood without risk of contamination.

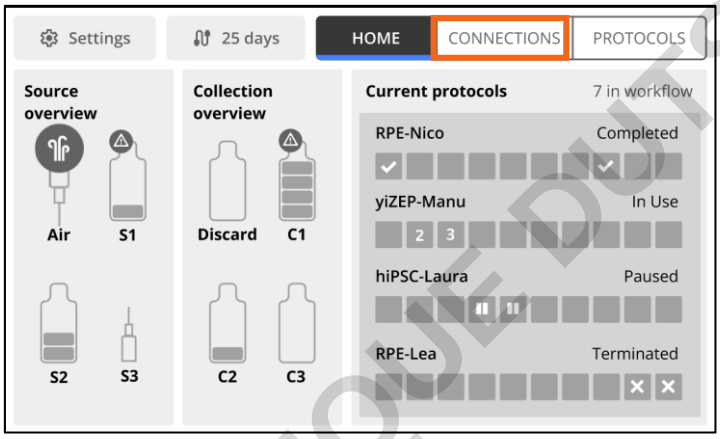
DOMINIQUE DUTSCHER SAS

CONNECTION COLLECTION

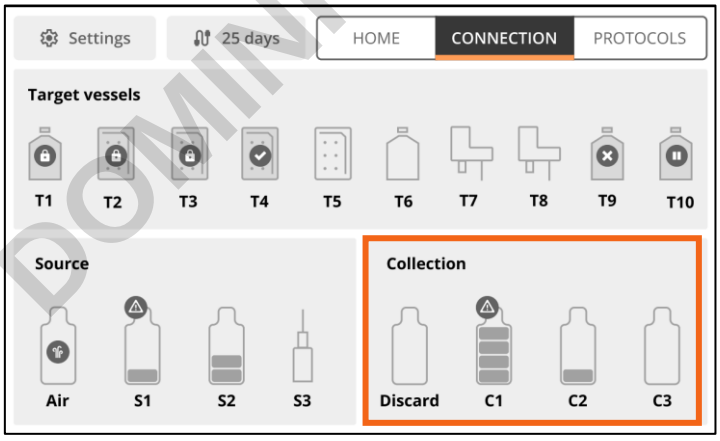
A glass bottle must be connected to line C0 as a waste container for the protocol to start.



1. Bring your bottle equipped with a Collection Bottle Adapter.

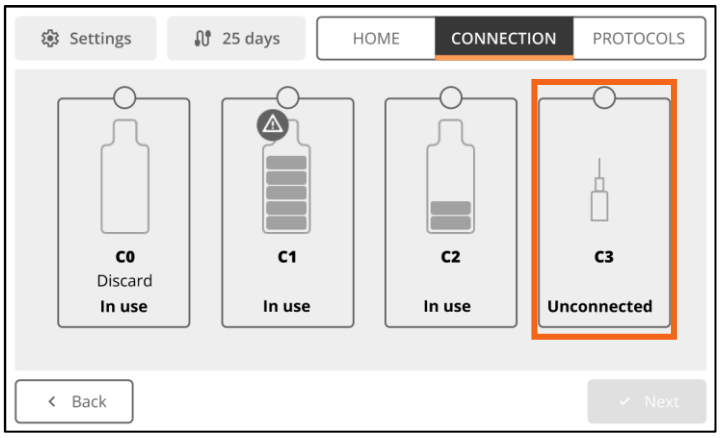


2. Click on the “Connection” button.



3. Click on the Collection Bottle area.

DOMINIQUE DUTSCHER SAS



4. Click on the connectors of the lines where you want to connect your Collection Bottles.

The lines available for a new bottle connection are shown with a disconnected connector and have the status “Unconnected.”



5. Click on the “Next” button.



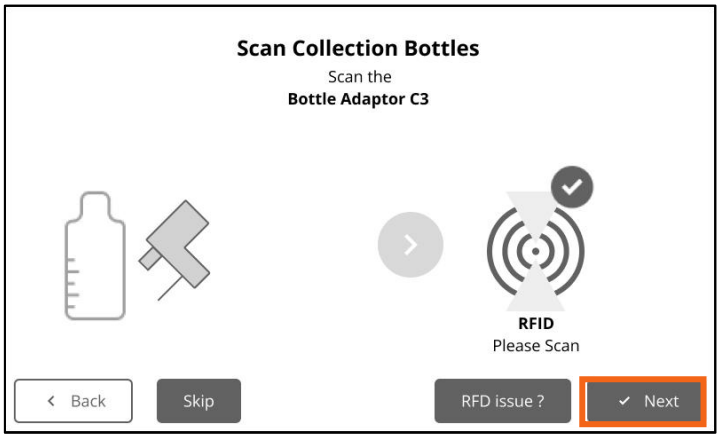
6. Place the RFID tag of the Collection Bottle Adapter Connector on the RFID scanning area of the control panel.

An audible beep will confirm that the scan is successful.

In case of unsuccessful scan, please refer to the “RFID issue” procedure.



DOMINIQUE DUTSCHER SAS



7. Click on the “Next” button.



8. Place the RFID tag of the Tubing Set Connector for the previously selected line on the RFID scanning area of the control panel.

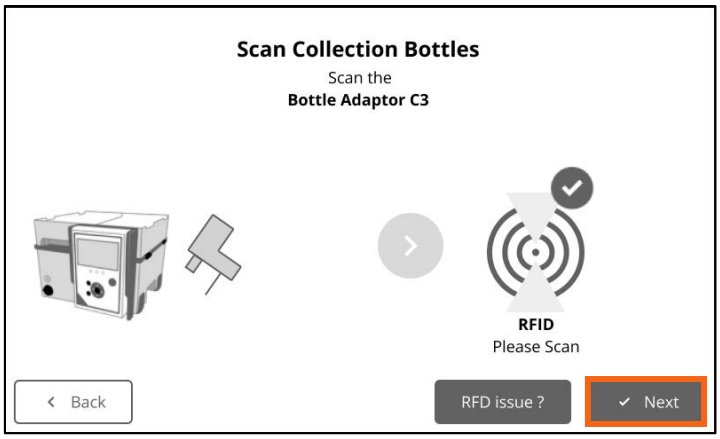
ℹ Source connectors are white, and their number is indicated on the RFID tag.

ℹ An audible beep will confirm that the scan is successful.

⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



DOMINIQUE DUSCHER SAS



9. Click on the “Next” button.

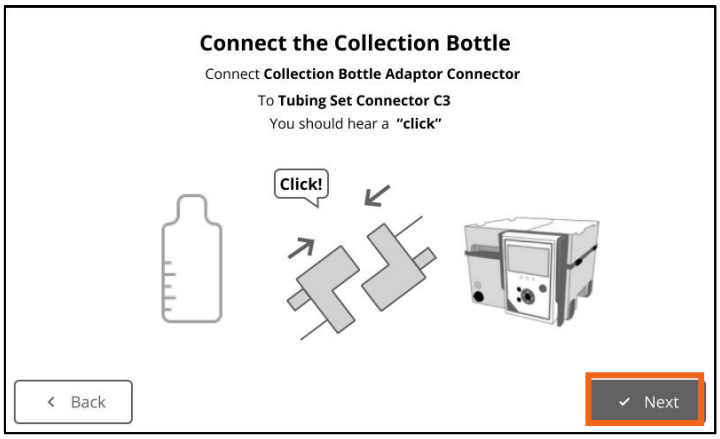


10. Connect the Collection Bottle Adapter Connector to the Tubing Set Connector



⚠ Caution: Make sure you hear a ‘click’ when connecting. An incorrectly inserted connector can cause overpressure, resulting in the tubing set opening and contamination of the entire fluid circuit.

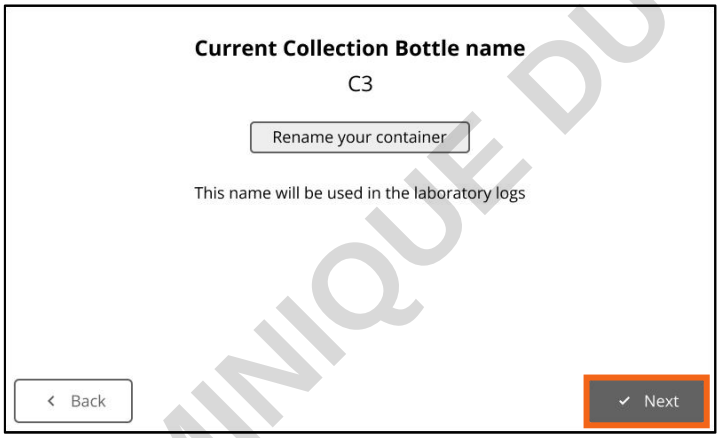
DOMINIQUE DUTSCHER SAS



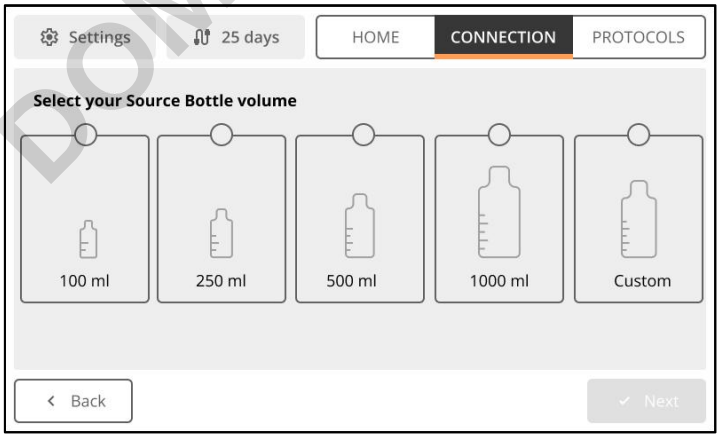
11. Click on the “Next” button.



12. If you want to assign a custom name to the Collection Bottle, click on the “Rename your container” button.



13. Click on the “Next” button.

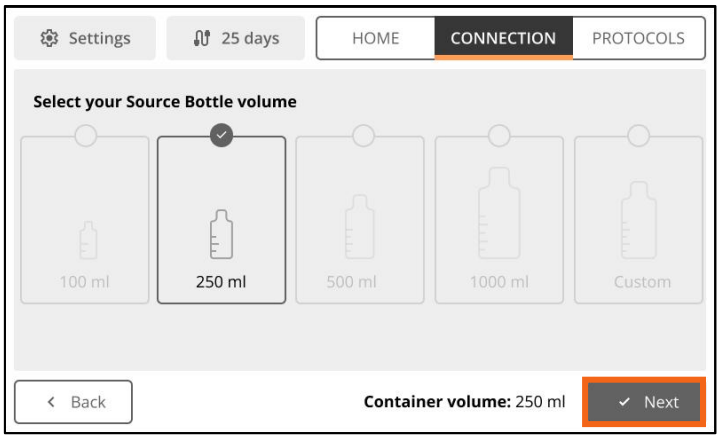


14. Select the volume of the container you have just connected to the Tubing Set.

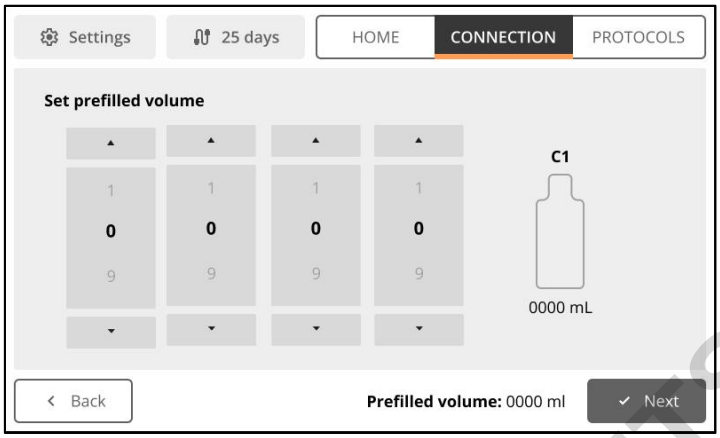
ℹ It is also possible to use the “Custom” option to set an intermediate volume that is not listed.

ℹ The volume must be entered in millilitres (mL).

DOMINIQUE DUTSCHER SAS

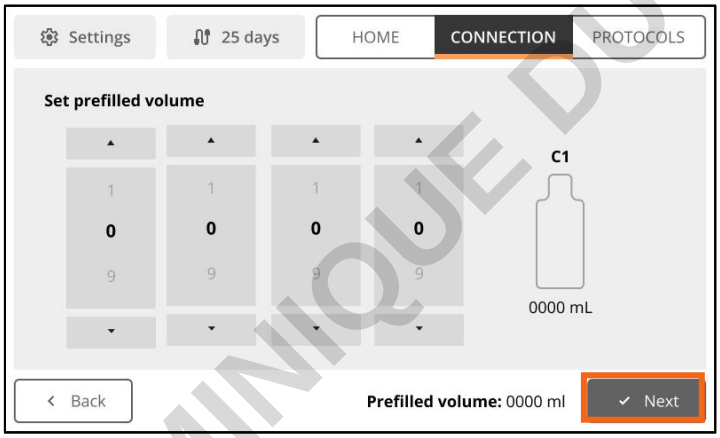


15. Click on the “Next” button.

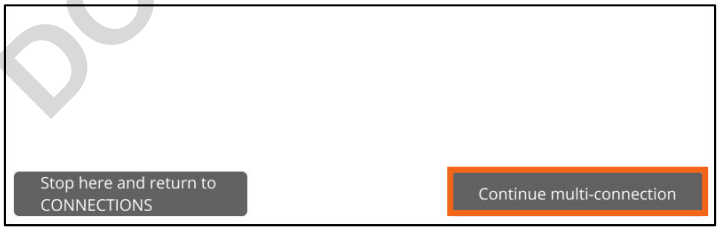


16. If the bottle you have connected is not empty, select the volume of liquid inside.

ℹ The volume must be entered in millilitres (mL).

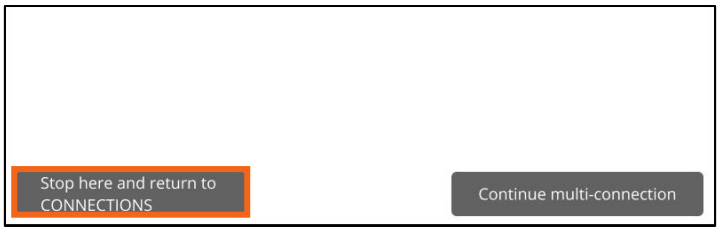


17. Click on the “Next” button.



18. Click the ‘Continue multi-connection’ button to move on to the next connection.

DOMINIQUE DUTSCHER SAS



ℹ Click the 'Stop here and return to CONNECTIONS' button if you do not want to connect a new Collection Bottle.

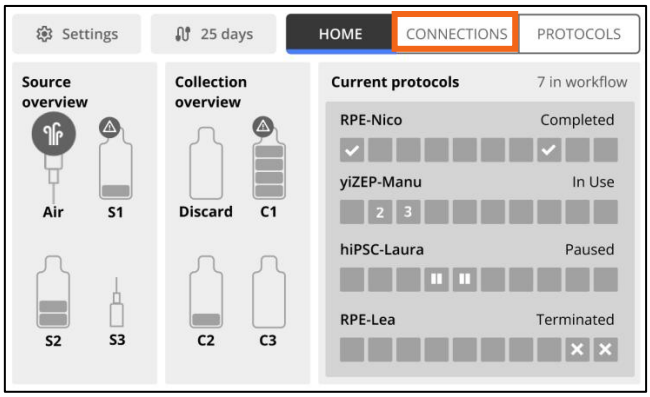


19. Once all connections have been completed, click on 'Back to Connections' button to close the procedure.

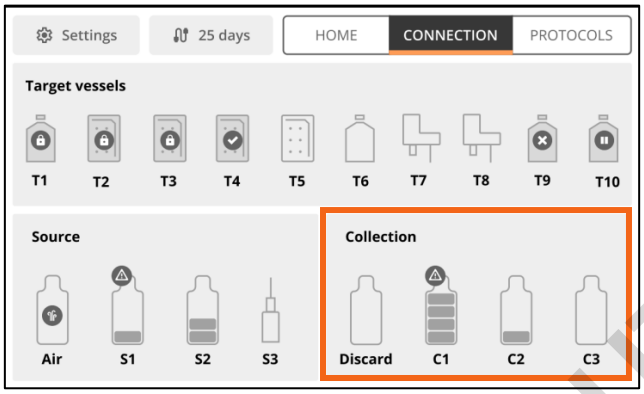
DOMINIQUE DUTSCHER SAS

TEMPORARY DISCONNECTION COLLECTION

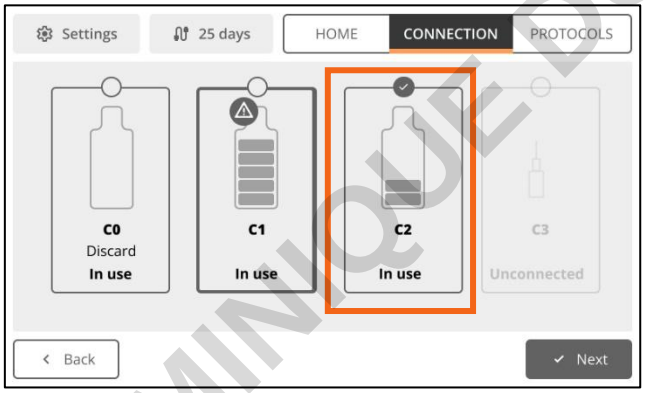
Use this procedure to replace Collection Bottles while pausing the protocols that are currently using it.



1. Click on the “Connection” button.

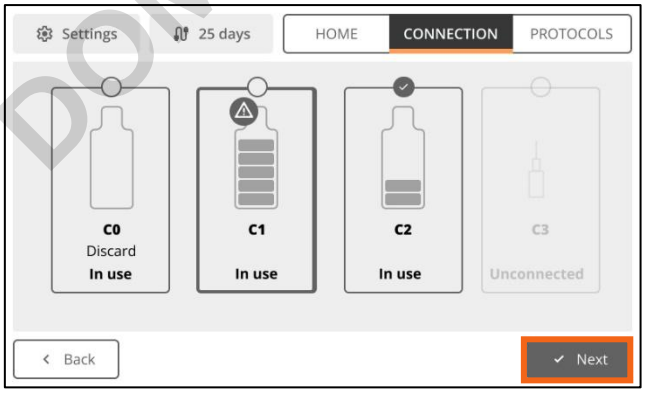


2. Click on the Collection Bottles area.



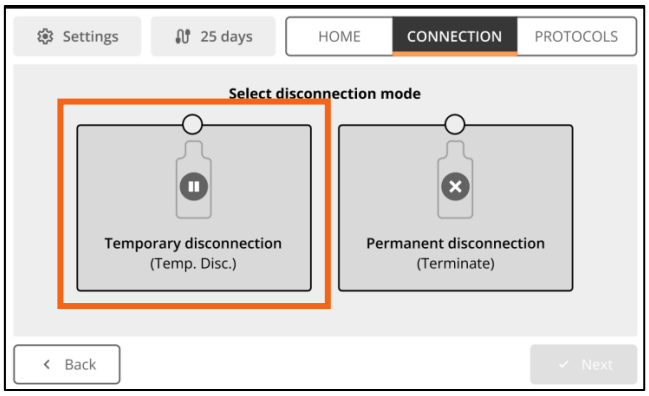
3. Click on the connectors of the lines where you want to disconnect your Collection Bottles.

The lines available for this disconnection are shown with a bottle and have the status “In use.”

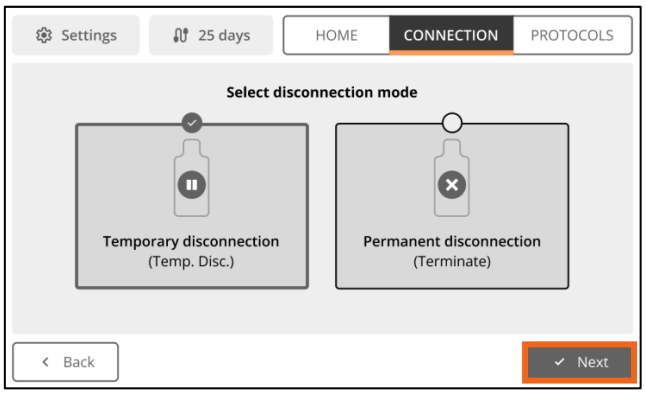


4. Cliquez sur le bouton « Next ».

DOMINIQUE DUTSCHER SAS



5. Click on the “Temporary disconnection” button.



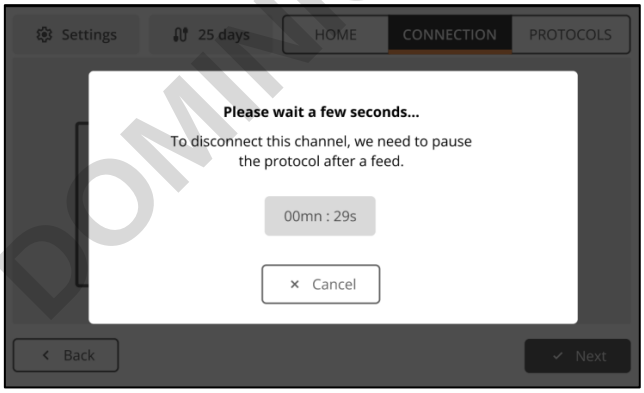
6. Click on the “Next” button.



7. Nestor will inform you of the impact of this operation on the connected vessel targets.

Nestor will pause all protocols using these Collection Bottles and will resume them once new Collection Bottles are reconnected.

Click on the ‘Launch the process’ button to start the procedure.



To avoid losing the cultured cells, source disconnection is only available after the last medium addition.

DOMINIQUE DUTSCHER SAS







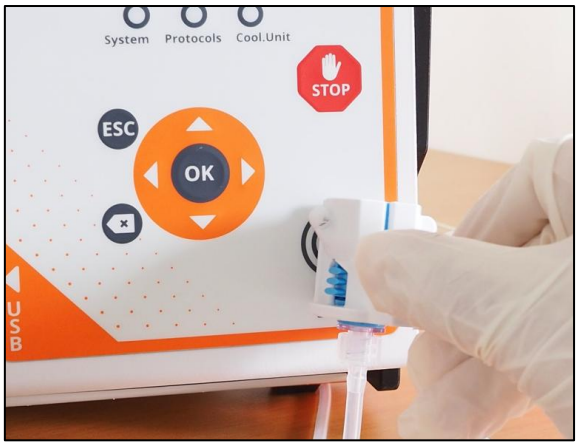
8. Disconnect the Collection Bottle Adapter Connector from the Tubing Set Connector.

9. Place the RFID tag of the Tubing Set Adapter Connector on the RFID scanning area of the control panel.

ⓘ An audible beep will confirm that the scan is successful.

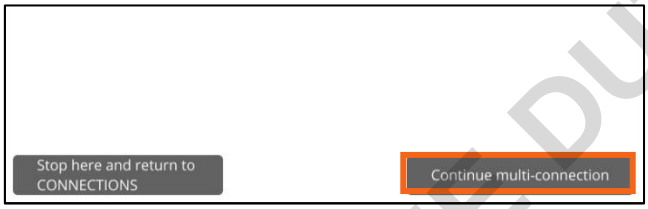
⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.

DOMINIQUE DUTSCHER SAS





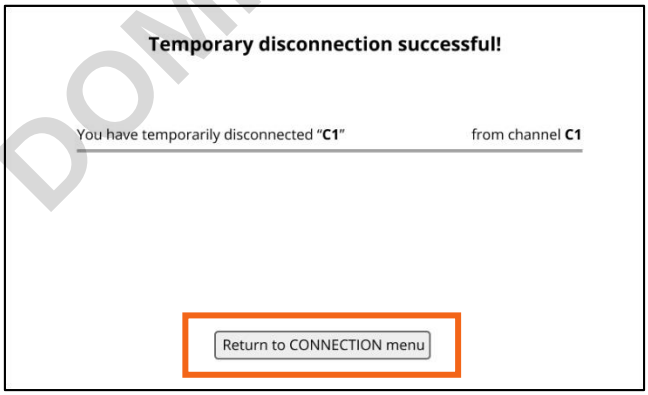
10. Click on the “Next” button.



11. Click the ‘Continue multi-disconnection’ button to move on to the next disconnection.



ⓘ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to disconnect another Collection Bottle.



12. Once all connections have been completed, click on ‘Back to Connections’ button to close the procedure.

DOMINIQUE DUTSCHER SAS

DOMINIQUE DUTSCHER SAS

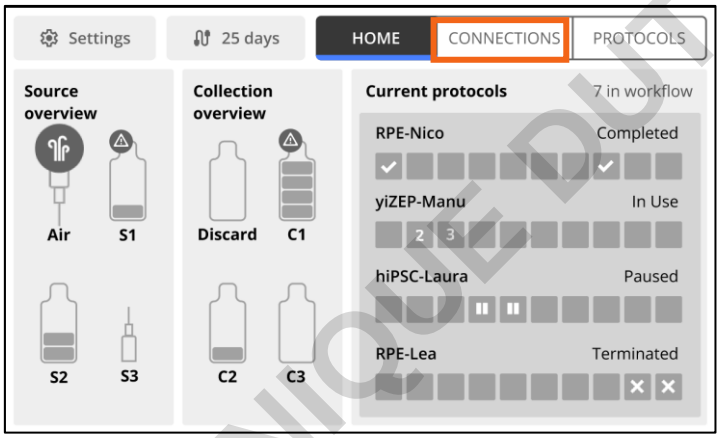
RECONNECTION COLLECTION

Use this procedure if you want to reconnect a Collection Bottle after a Temporary Disconnection.

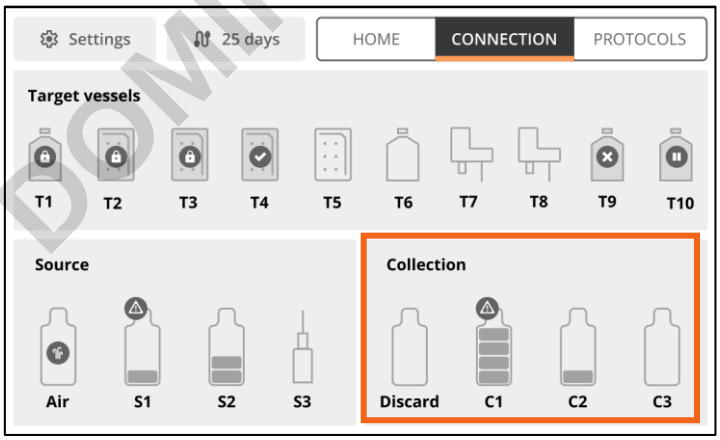
ℹ A glass bottle must be connected to line C0 as a waste container for the protocol to start.



1. Bring your bottle equipped with a Collection Bottle Adapter.

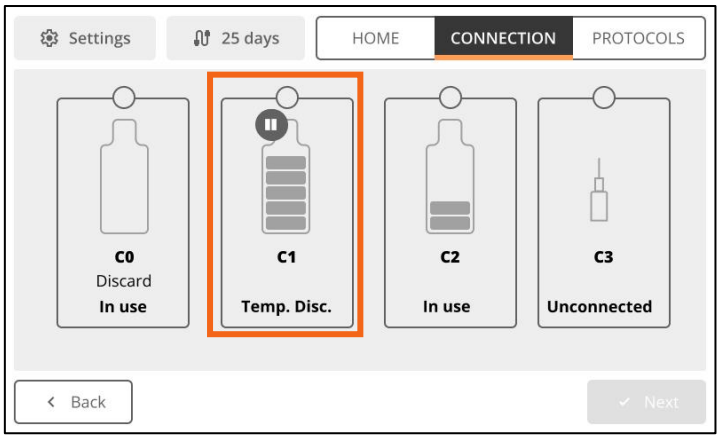


2. Click on the “Connection” button.



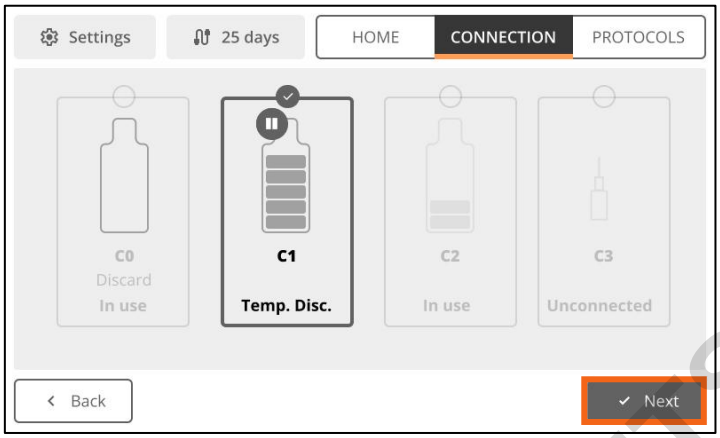
3. Click on the Collection Bottle area.

DOMINIQUE DUTSCHER SAS



4. Click on the connectors of the lines where you want to connect your Collection Bottles.

The lines available for a new bottle connection are shown with a bottle and have the status “Temp. Disc.”.



5. Click on the “Next” button.



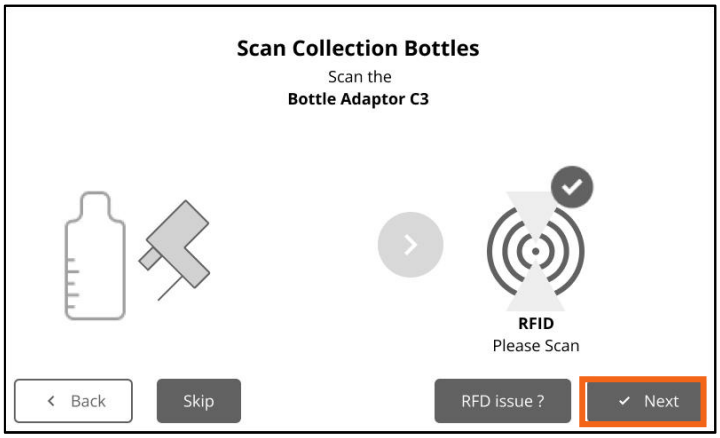


6. Place the RFID tag of the Collection Bottle Adapter Connector on the RFID scanning area of the control panel.

An audible beep will confirm that the scan is successful.

In case of unsuccessful scan, please refer to the “RFID issue” procedure.

DOMINIQUE DUTSCHER SAS



7. Click on the “Next” button.



8. Place the RFID tag of the Tubing Set Connector for the previously selected line on the RFID scanning area of the control panel.

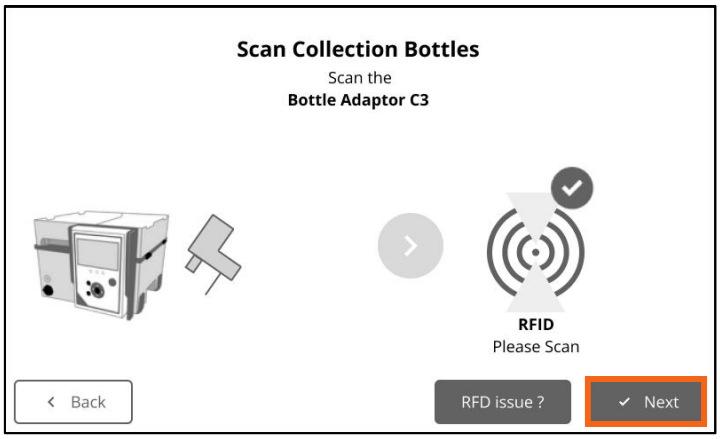
ℹ Source connectors are white, and their number is indicated on the RFID tag.

ℹ An audible beep will confirm that the scan is successful.

✕ In case of unsuccessful scan, please refer to the “RFID issue” procedure.



DOMINIQUE DUTSCHER SAS



9. Click on the “Next” button.

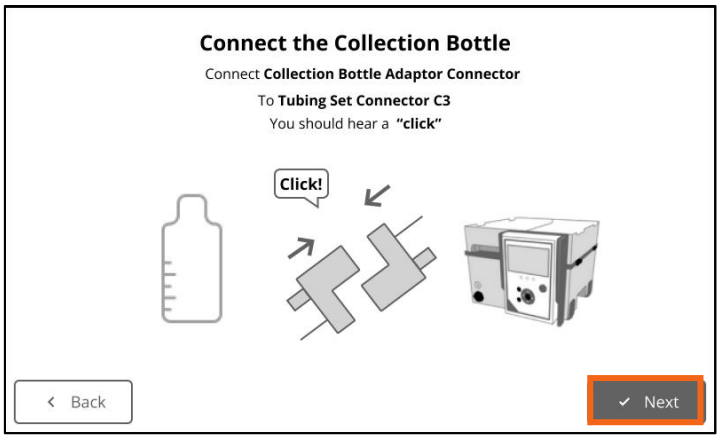


10. Connect the Collection Bottle Adapter Connector to the Tubing Set Connector

⚠ Caution: Make sure you hear a ‘click’ when connecting. An incorrectly inserted connector can cause overpressure, resulting in the tubing set opening and contamination of the entire fluid circuit.



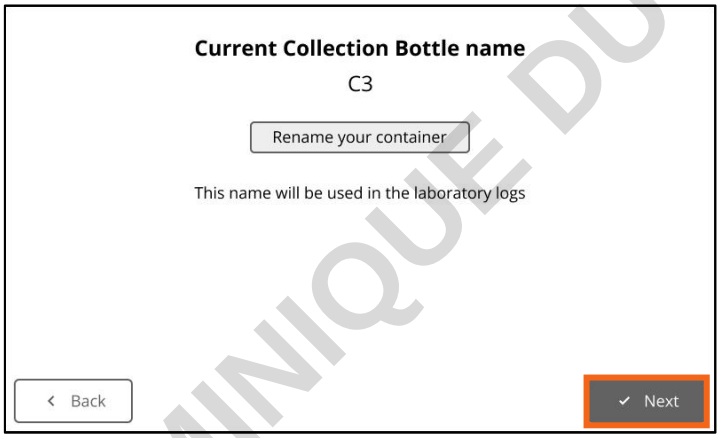
DOMINIQUE DUTSCHER SAS



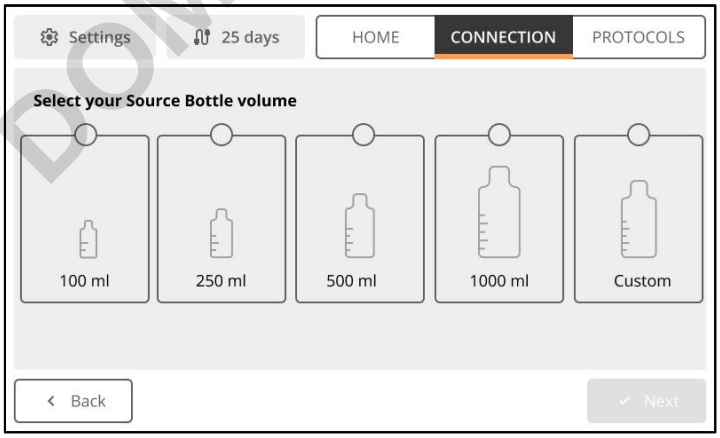
11. Click on the “Next” button.



12. If you want to assign a custom name to the Collection Bottle, click on the “Rename your container” button.



13. Click on the “Next” button.

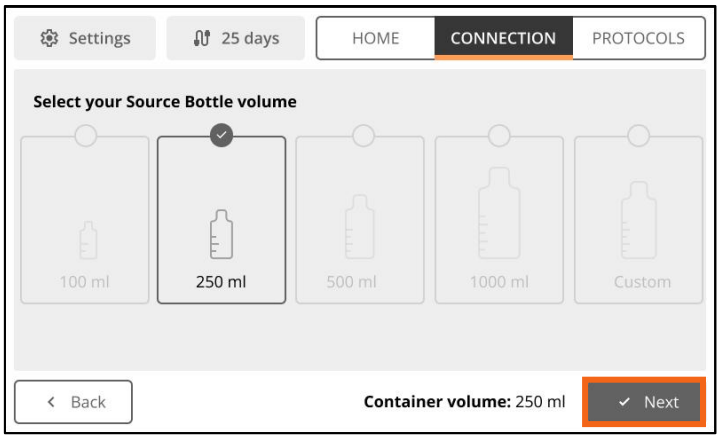


14. Select the volume of the container you have just connected to the Tubing Set.

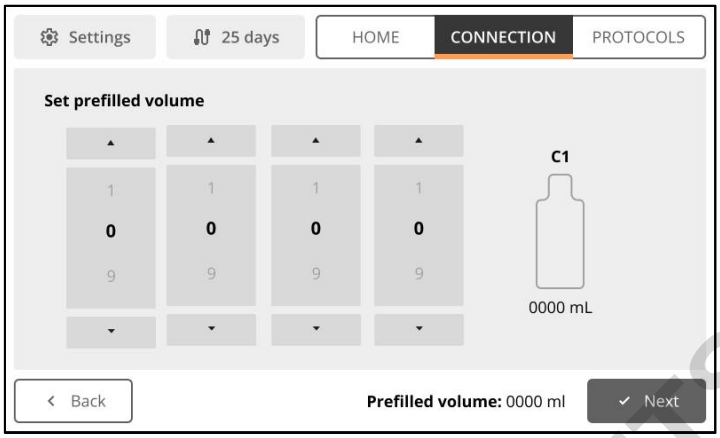
ℹ It is also possible to use the “Custom” option to set an intermediate volume that is not listed.

ℹ The volume must be entered in millilitres (mL).

DOMINIQUE DUTSCHER SAS

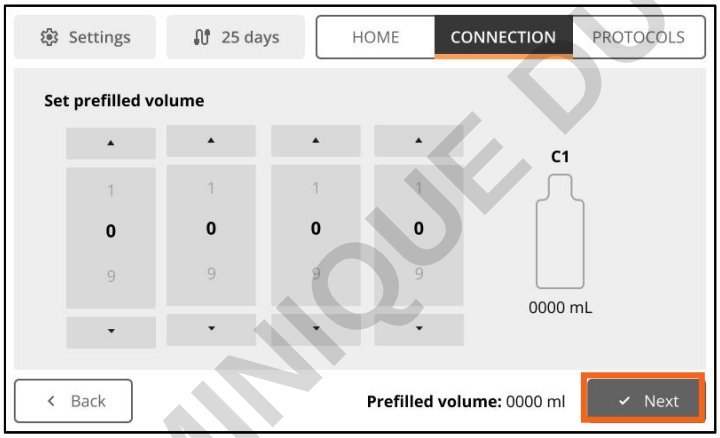


15. Click on the “Next” button.

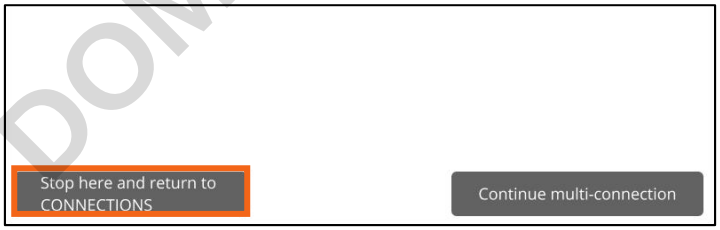


16. If the bottle you have connected is not empty, select the volume of liquid inside.

ℹ The volume must be entered in millilitres (mL).



17. Click on the “Next” button.



ℹ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to connect a new Collection Bottle.

DOMINIQUE DUTSCHER SAS

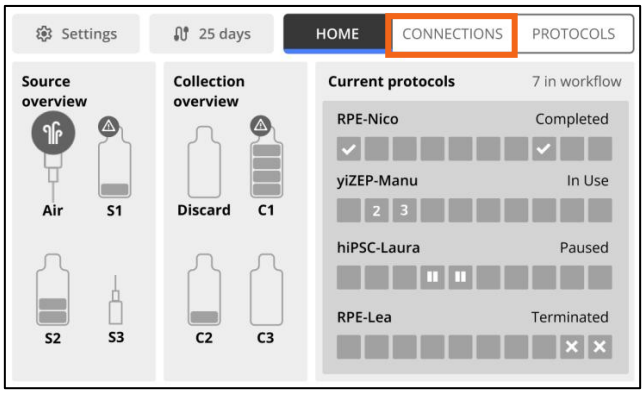


Once all connections have been completed, click on 'Back to Connections' button to close the procedure.

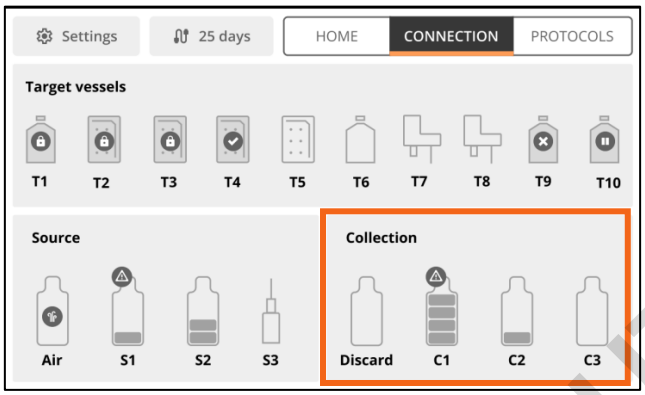
DOMINIQUE DUTSCHER SAS

PERMANENT DISCONNECTION COLLECTION

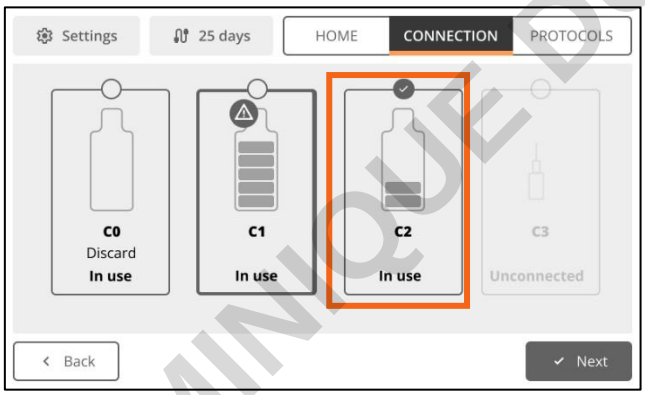
Use this procedure to permanently disconnect a source and release the line



1. Click on the “Connection” button.

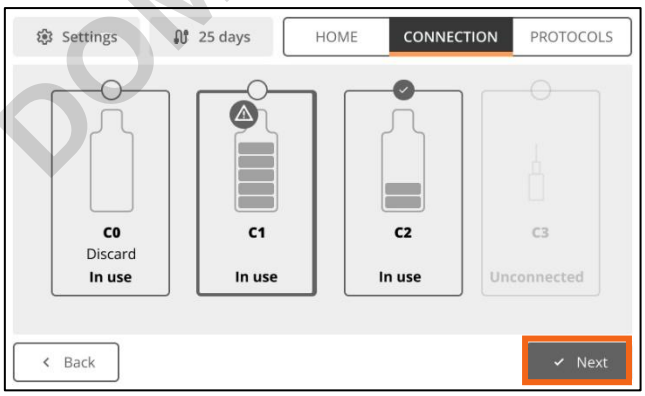


2. Click on the Collection Bottles area.



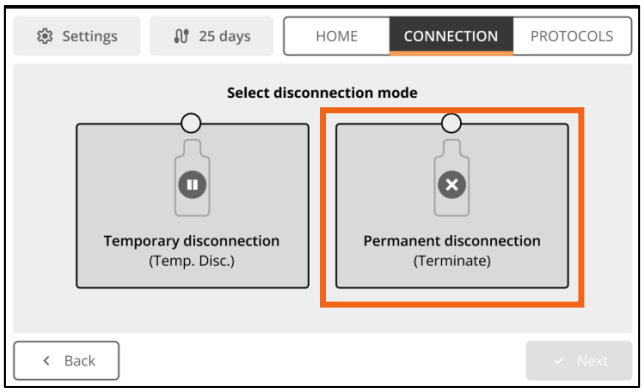
3. Click on the connectors of the lines where you want to disconnect your Collection Bottles.

   The lines available for this disconnection are shown with a bottle and have the status “In use.”

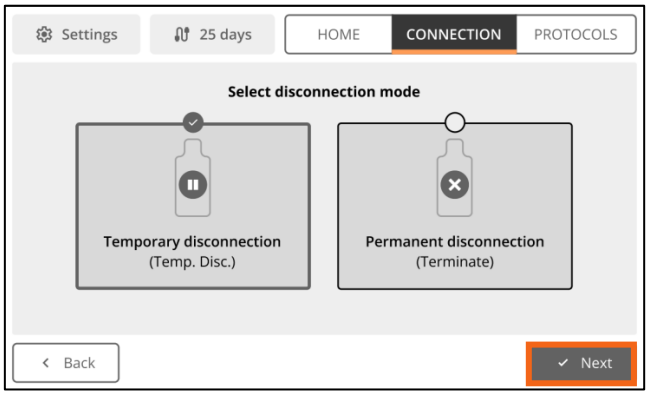


4. Cliquez sur le bouton « Next ».

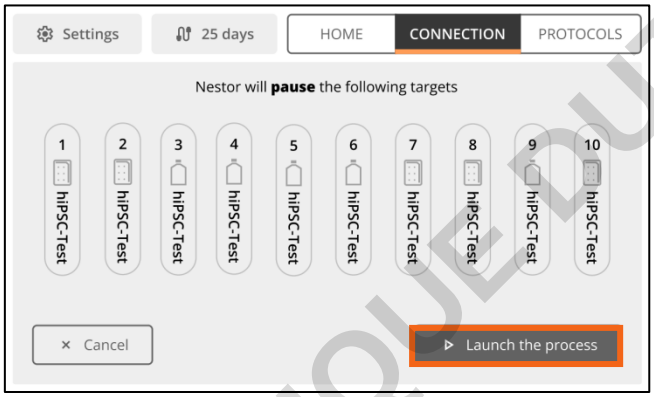
DOMINIQUE DUTSCHER SAS



5. Click on the “Permanent disconnection” button.



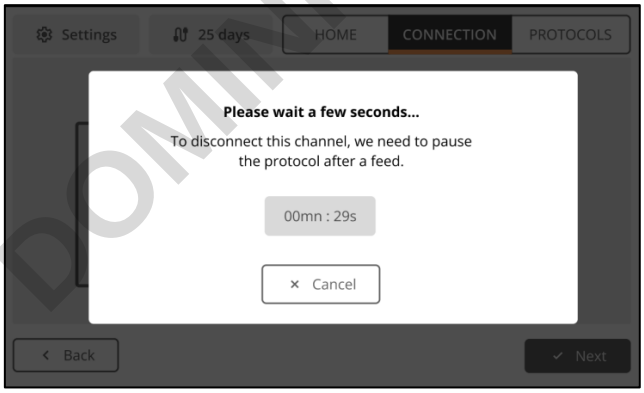
6. Click on the “Next” button.



7. Nestor will inform you of the impact of this operation on the connected vessel targets.

Nestor will pause all affected protocols. To resume the protocols, you will need to follow the temporary disconnection and reconnection procedures for the Target.

Click on the ‘Launch the process’ button to start the procedure.



To avoid losing the cultured cells, source disconnection is only available after the last medium addition.

DOMINIQUE DUTSCHER SAS







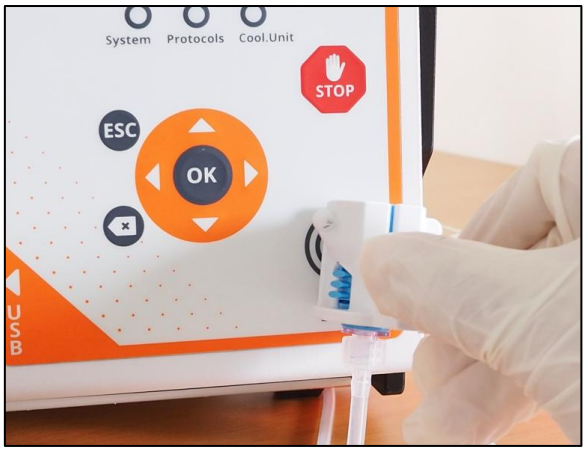
8. Disconnect the Collection Bottle Adapter Connector from the Tubing Set Connector.

9. Place the RFID tag of the Tubing Set Adapter Connector on the RFID scanning area of the control panel.

ⓘ An audible beep will confirm that the scan is successful.

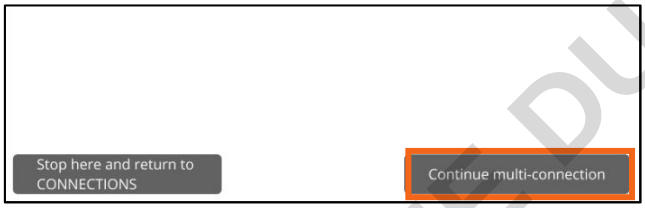
⊗ In case of unsuccessful scan, please refer to the “RFID issue” procedure.

DOMINIQUE DUTSCHER SAS





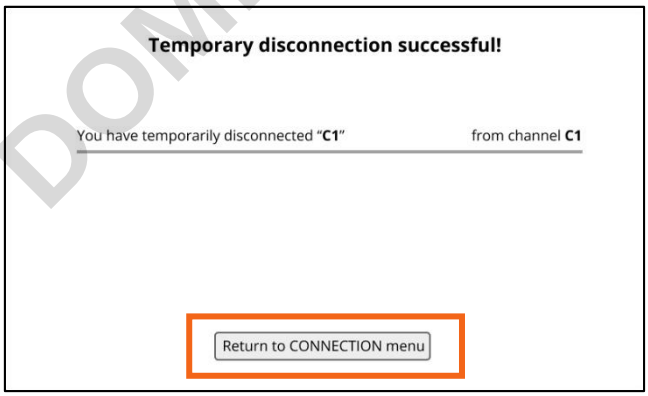
10. Click on the “Next” button.



11. Click the ‘Continue multi-disconnection’ button to move on to the next disconnection.



ℹ Click the ‘Stop here and return to CONNECTIONS’ button if you do not want to disconnect another Collection Bottle.



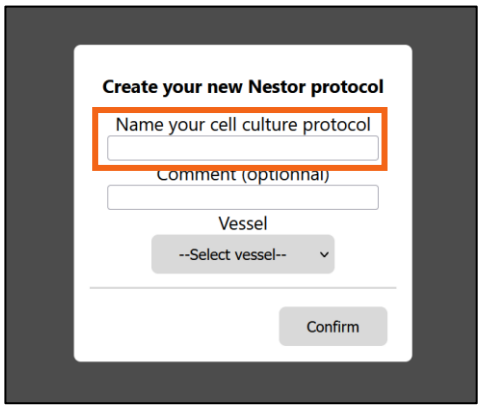
12. Once all connections have been completed, click on ‘Back to Connections’ button to close the procedure.

DOMINIQUE DUTSCHER SAS

DOMINIQUE DUTSCHER SAS

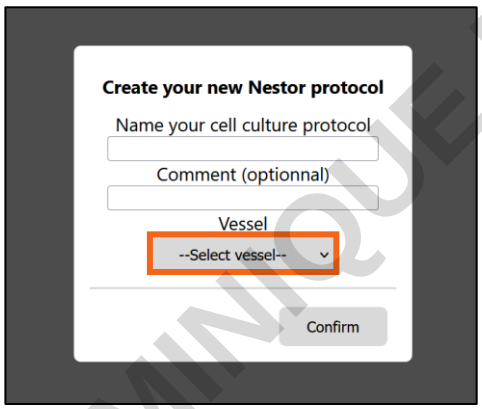
CREATE PROTOCOL

NEW PROTOCOLE

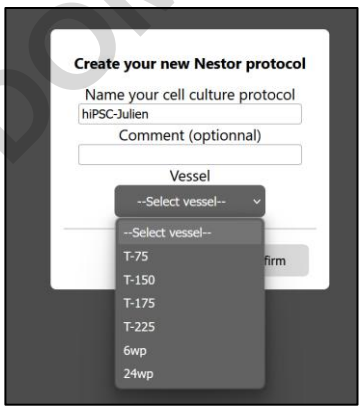


1. Log in to the protocol creation interface via the link https://protocolcreator.cellaven.com/ , or directly from the application installed on the tablet provided with Nestor.

2. Name your protocol by clicking on the 'Name your cell culture protocol' field.

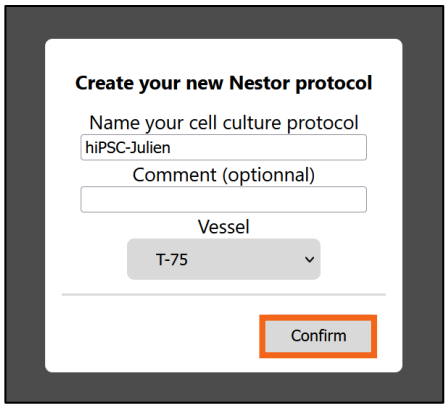


3. Select the type of vessel for which you wish to create your protocol by clicking on the 'Select vessel' button.



4. Select the type of vessel for which you wish to create your protocol by clicking on the 'Select vessel' button.

DOMINIQUE DUTSCHER SAS



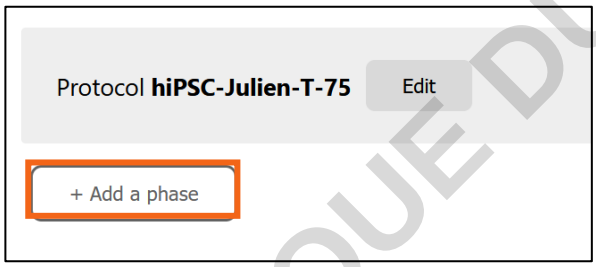
5. Click on the ‘Confirm’ button.

LOOPS

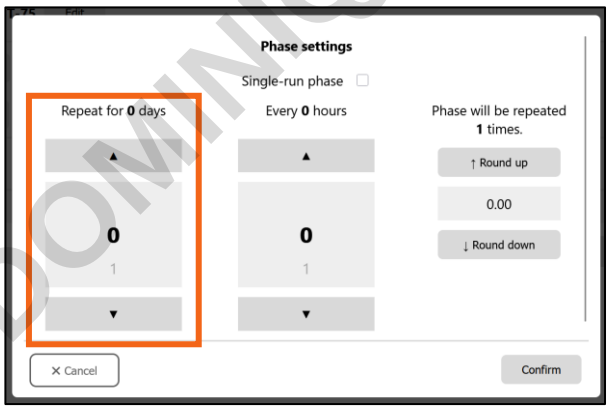
Protocols are organised into successive loops, each consisting of a set of steps. You can add as many loops as necessary to build your protocol. It must contain at least one loop.

ADD A PHASE

This command allows you to add a loop of instructions and define the number of repetitions as well as the execution frequency.

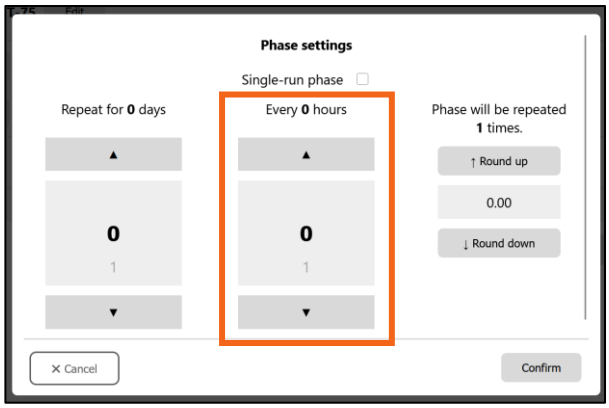


1. Click on the ‘Add a phase’ button.

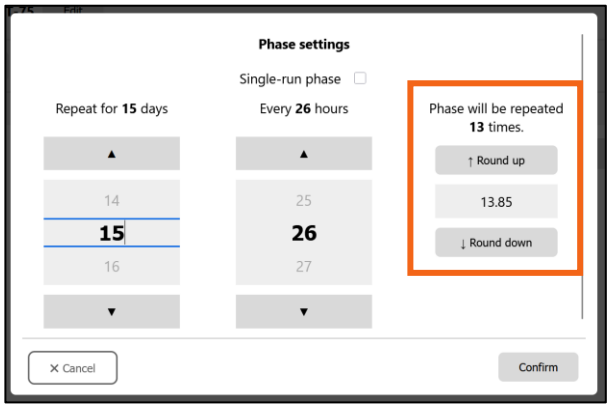


2. Use the ‘Repeat for X days’ dial to set the number of days for which the loop will be repeated.

DOMINIQUE DUTSCHER SAS

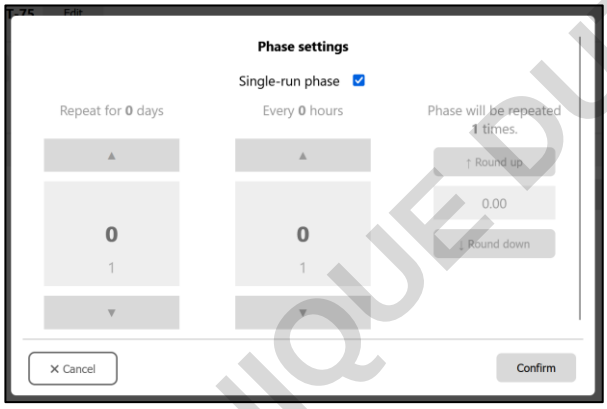


3. Use the ‘Every X hours’ dial to set the number of days for which the loop will be repeated.

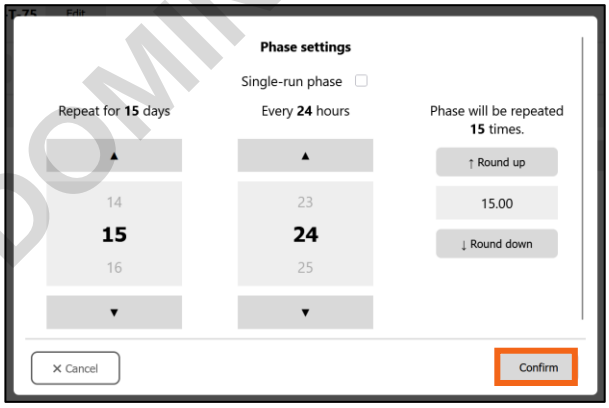


If the combination of the number of days and the interval between each repetition does not result in a whole number of repetitions, the system will prompt you to round this number up or down to the nearest whole number.

This will affect the total duration of the protocol.

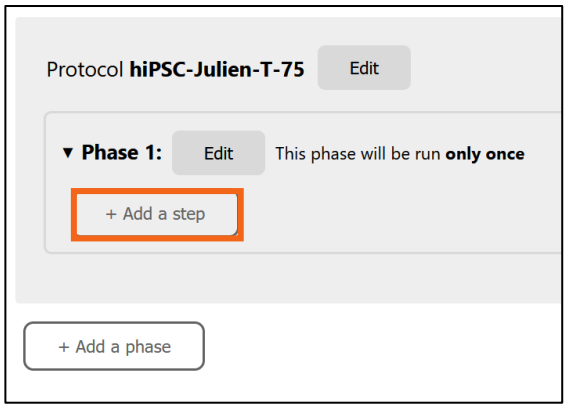


If you want the loop to repeat only once, click on the ‘Single run phase’ button.

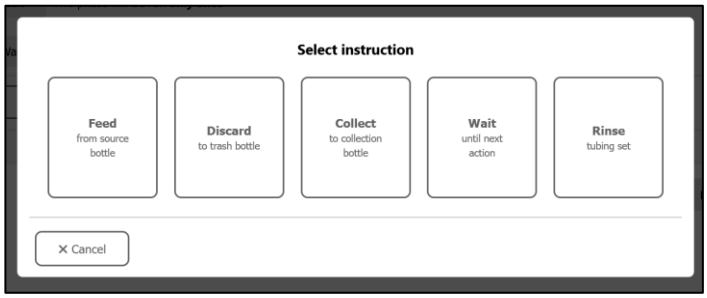


4. Click on the ‘Confirm’ button.

DOMINIQUE DUTSCHER SAS

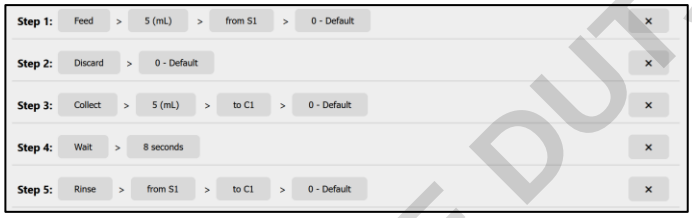


5. Click on the ‘Add a step’ button.



6. Select the instruction you want Nestor to perform.

To learn about the function of each instruction, please refer to the “Steps” section.



Repeat steps 5 and 6 to add new instructions to the loop.

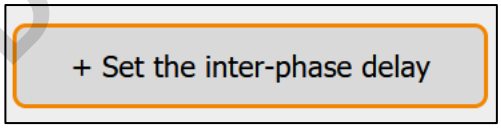
You can edit an instruction by clicking on its name.

To delete a step, click on the cross located on the right side of the corresponding line

DELAY

This command allows Nestor to apply a delay between the end of one loop and the beginning of the next. It is only available between two successive loops and helps standardize experimental conditions by controlling the waiting time between each phase.

ℹ If you want to add a delay before starting the first loop, please refer to the “Launch a protocol” section.



1. Click the “+Set the inter-phase delay” button. It is located between two successive loops.

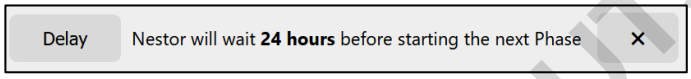
DOMINIQUE DUTSCHER SAS



2. Select the time unit from the drop-down menu, then set the waiting duration using the dial.



3. Click the “Confirm” button.



A line will then appear between the two loops, indicating the delay you have set.

You can edit the instruction by clicking the “Delay” button.

To delete a step, click on the cross located on the right side of the corresponding line.

DOMINIQUE DUTSCHER SAS

STEPS

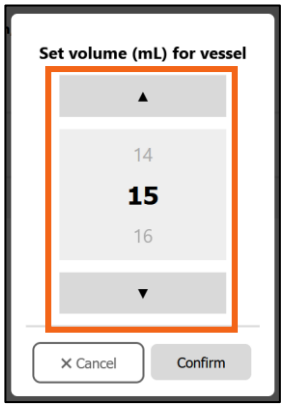
Nestor can execute several types of commands. You can use each of them, in any order you choose, to build the steps of your protocol.

FEED

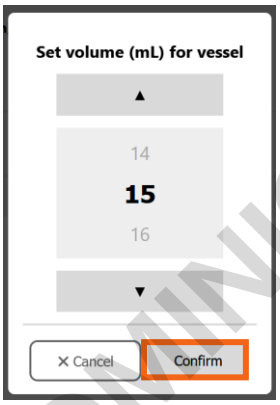
This command allows Nestor to fill the targets involved in the protocol using the source you have selected.



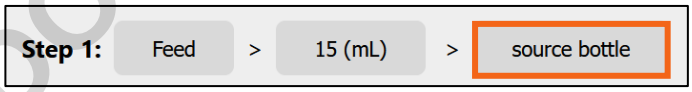
1. Click on the 'Volume (mL) for vessel' button.



2. Select the volume, in millilitres, that you wish to add to your target from your source. Click on the 'Confirm' button.

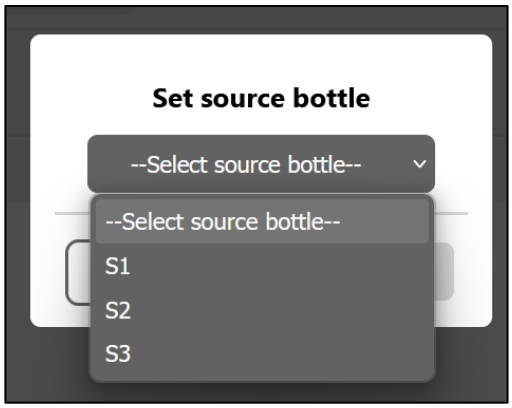


3. Click on the 'Confirm' button.



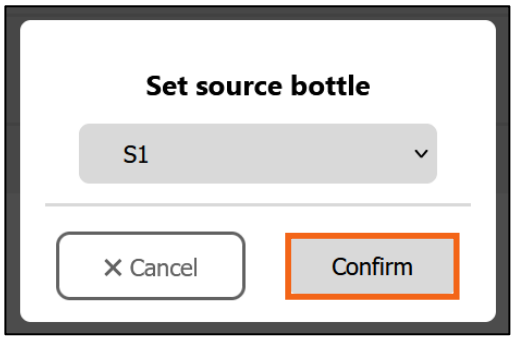
4. Click on the 'Source bottle' button.

DOMINIQUE DUTSCHER SAS

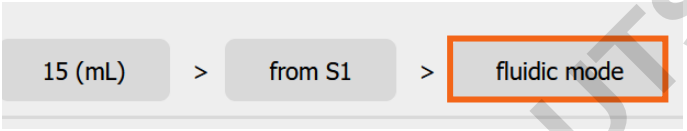


5. Click on the ‘Select source bottle’ button and choose the source channel you want to use for your protocol

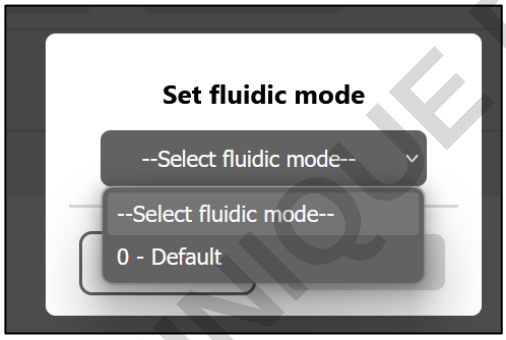
ℹ You can change this selection directly from Nestor when launching the protocol, in order to adapt it to the actual configuration connected.



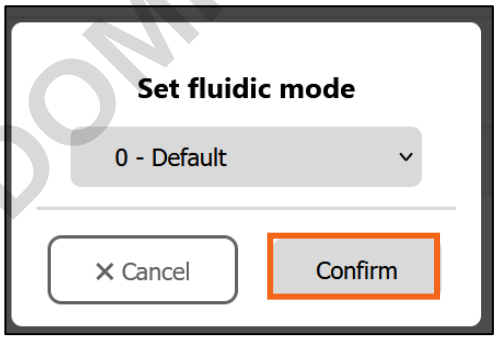
6. Click on the ‘Confirm’ button.



7. Click on the ‘Fluidic mode’ button.



8. Click the “Set fluidic mode” button, then select the “0 – Default” option.

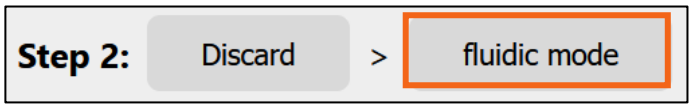


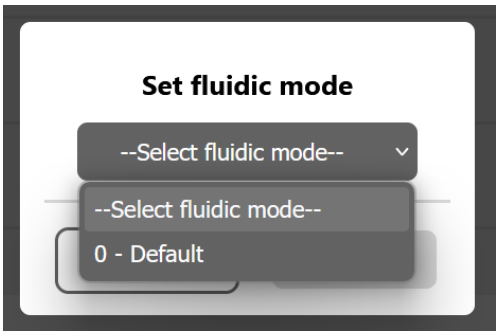
9. Click on the ‘Confirm’ button.

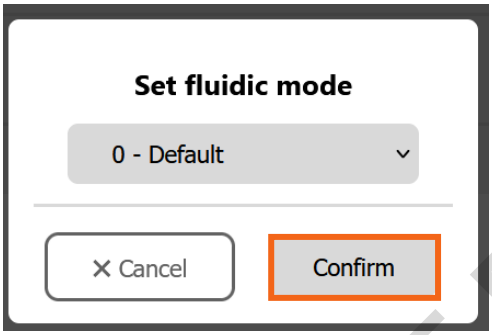
DOMINIQUE DUTSCHER SAS

DISCARD

This command allows Nestor to completely empty the targets into the glass discard bottle connected to line C0.







1. Click on the 'Fluidic mode' button.
2. Click on the 'Set fluidic mode' button and click on the '0 – Default' option.
3. Click on the 'Confirm' button.

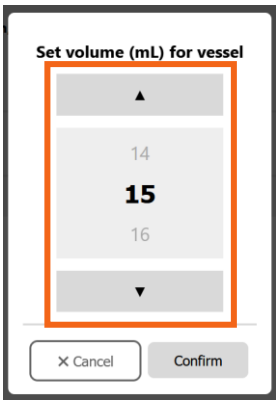
COLLECT

This command allows Nestor to collect a defined volume from the targets and transfer it into a bottle dedicated to sampling.

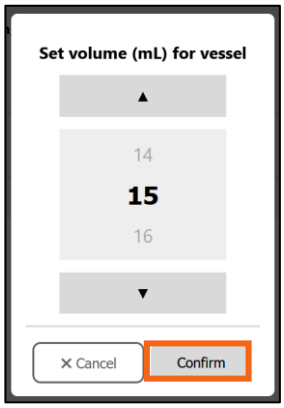


1. Click on the 'Volume (mL) for vessel' button.

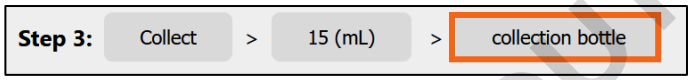
DOMINIQUE DUTSCHER SAS



2. Select the volume, in millilitres, that you wish to remove from your target and transfer to a collection bottle.



3. Click on the 'Confirm' button.

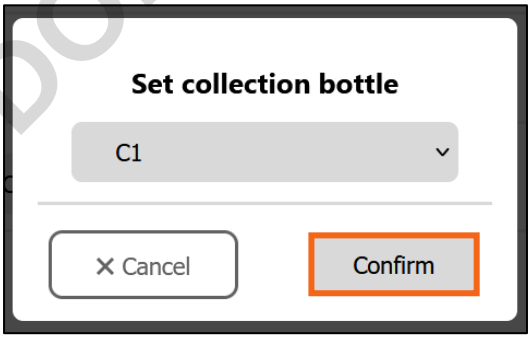


4. Click on the 'Collection Bottle' button.



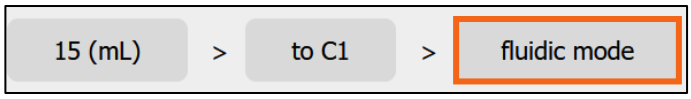
5. Click on the 'Select collection bottle' button and choose the collection bottle channel you want to use for your protocol.

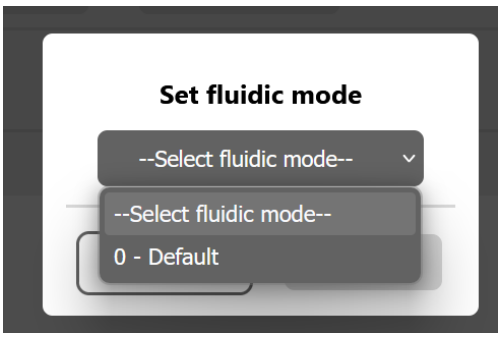
ℹ You can change this selection directly from Nestor when launching the protocol, in order to adapt it to the configuration that is actually connected.



6. Click on the 'Confirm' button.

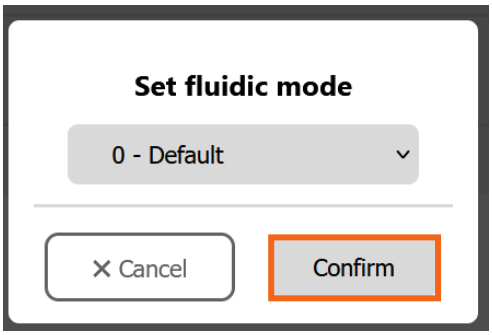
DOMINIQUE DUTSCHER SAS





7. Click on the 'Fluidic mode' button.

8. Click on the 'Set fluidic mode' button and click on the '0 – Default' option.

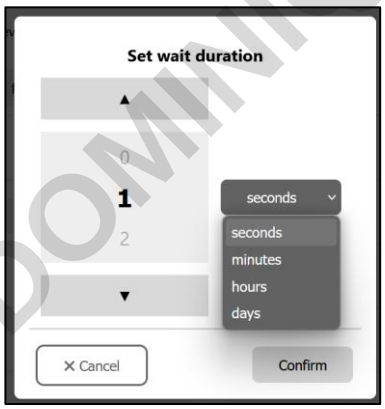


9. Click on the 'Confirm' button.

WAIT

This command allows Nestor to wait for a specified amount of time before moving on to the next step.





1. Click on the 'Wait duration' button.

2. Select the time unit from the drop-down menu, then set the waiting time using the dial.

DOMINIQUE DUTSCHER SAS



3. Click on the ‘Confirm’ button.

RINSE

This command allows Nestor to draw a defined volume from a given source and circulate it through the tubing set to a specified collection bottle, without passing through the targets.

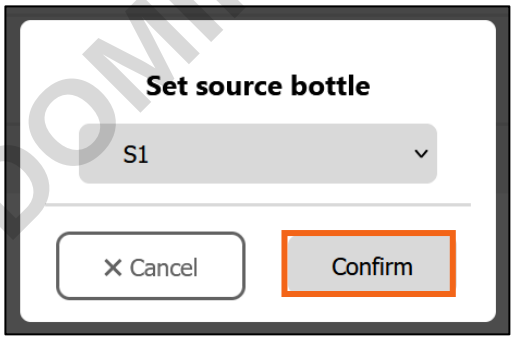


1. Click on the ‘Source bottle’ button.



2. Cliquez sur le bouton « Select source bottle » et choisissez la voie de la source que vous souhaitez utiliser pour votre protocole.

ℹ You will be able to modify this selection directly from Nestor when launching the protocol, in order to adapt it to the actual connected configuration.



3. Click on the ‘Confirm’ button.



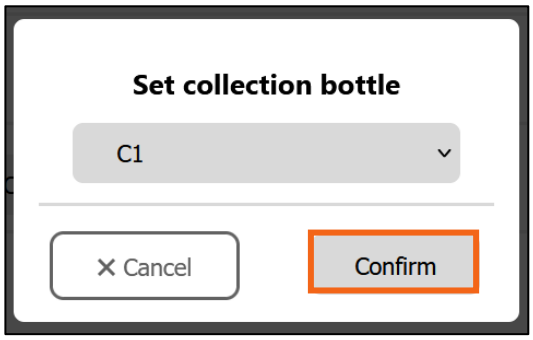
4. Click on the ‘Collection Bottle’ button.

DOMINIQUE DUTSCHER SAS

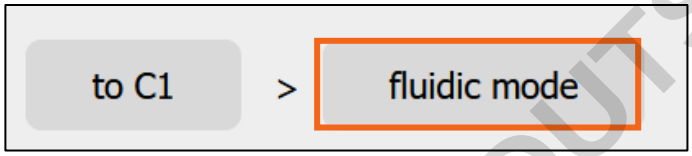


5. Click on the ‘Select collection bottle’ button and choose the collection bottle channel you want to use for your protocol.

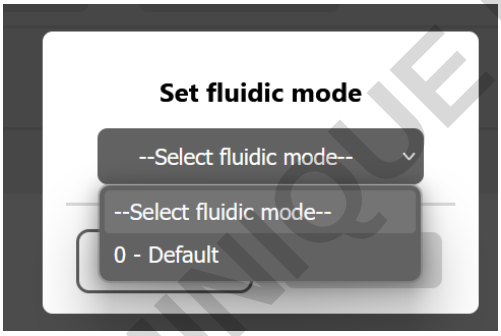
   ℹ You can change this selection directly from Nestor when launching the protocol, in order to adapt it to the configuration.



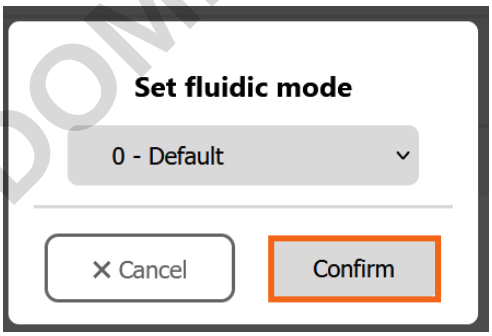
6. Click on the ‘Confirm’ button.



7. Click on the ‘Fluidic mode’ button.



8. Click the “Set fluidic mode” button, then select the “0 – Default” option.



9. Click on the ‘Confirm’ button.

DOMINIQUE DUTSCHER SAS

VERIFY YOUR PROTOCOL



Cette commande permet d'afficher votre protocole sous une forme traduite dans le langage d'exécution utilisé par Nestor.

EXPORT YOUR POTOCOL



Cette commande vous permet d'exporter votre protocole sous une forme traduite dans le langage d'exécution utilisé par Nestor.

DOMINIQUE DUTSCHER SAS

IMPORT PROTOCOL

Your Nestor has been delivered with several standard protocols already stored in its memory. To import new protocols, follow the procedure below.

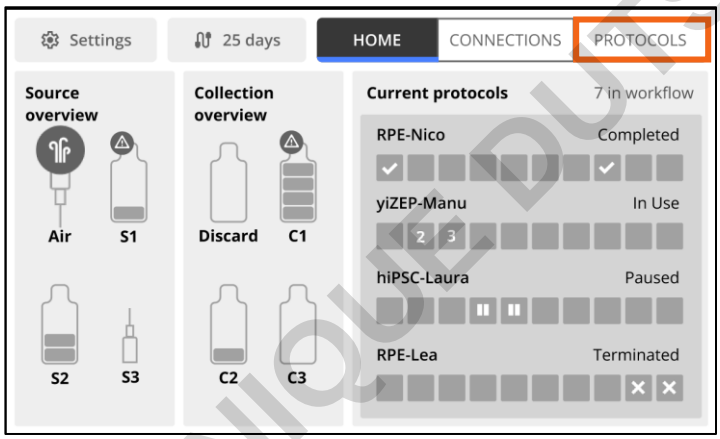
To create your own protocol, please refer to the “Create protocol” section.



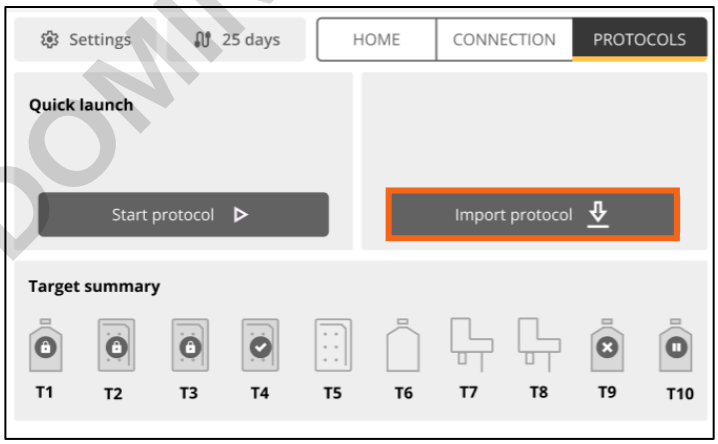
1. Save your protocol onto the provided USB drive in a folder named “Nestor/Protocol”.

2. Plug the USB drive containing the protocols to be imported into

ℹ The Input USB port located on the left side of the control panel.



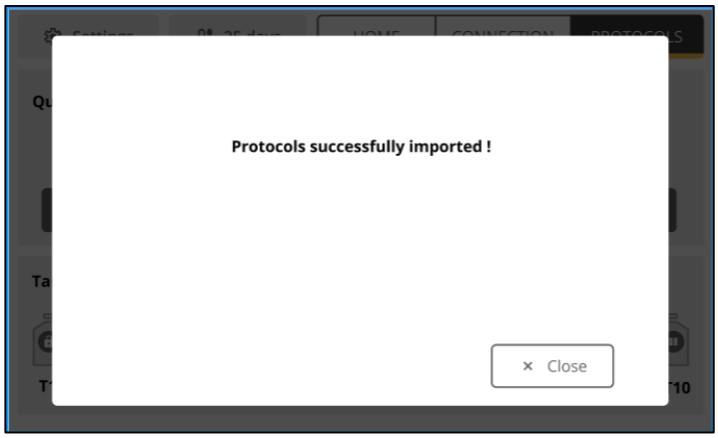
3. Click on the ‘Protocols’ button.



4. Click on the ‘Import protocol’ button.

ℹ The protocol import is carried out automatically by Nestor.

DOMINIQUE DUTSCHER SAS

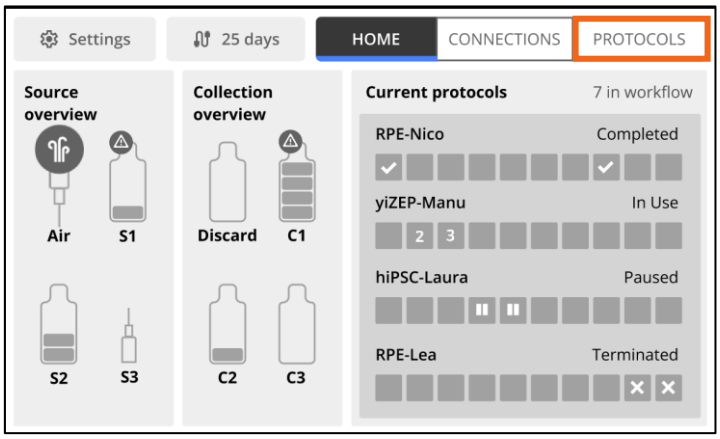


5. Click the “Close” button.

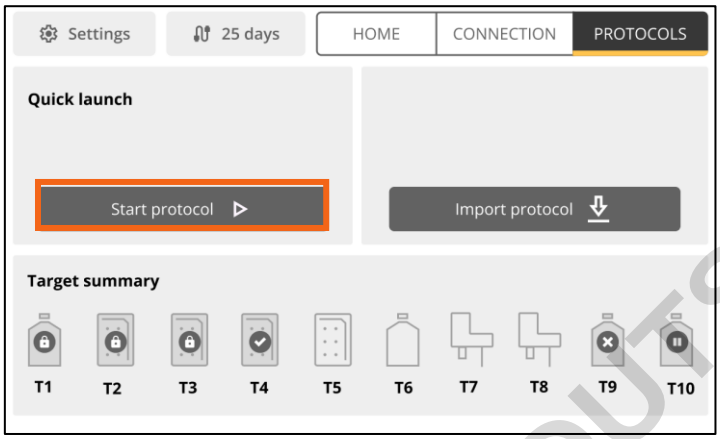
6. You can now remove the USB stick from its slot.

DOMINIQUE DUTSCHER SAS

LAUNCH A PROTOCOL



1. Click on the 'Protocols' button.



2. Click on the 'Start protocol' button.



3. Select the targets on which you want to launch the protocol.

ⓘ Only targets with the "Connected" status can be selected.

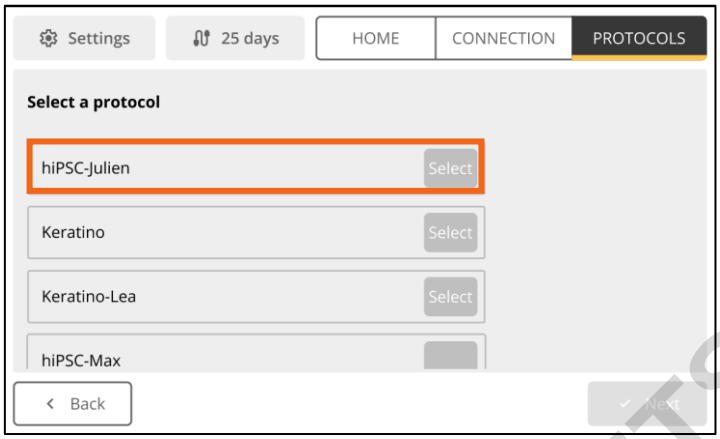
ⓘ For the targets to appear in the list, they must first be connected via the "Connection" button.
To do so, please follow the "Connection Target" procedure.

ⓘ You can only select targets of the same type (flasks or plates) and with the same capacity at the same time.

DOMINIQUE DUTSCHER SAS



4. Click on the ‘Next’ button.



5. Select the desired protocol by clicking on the corresponding line.

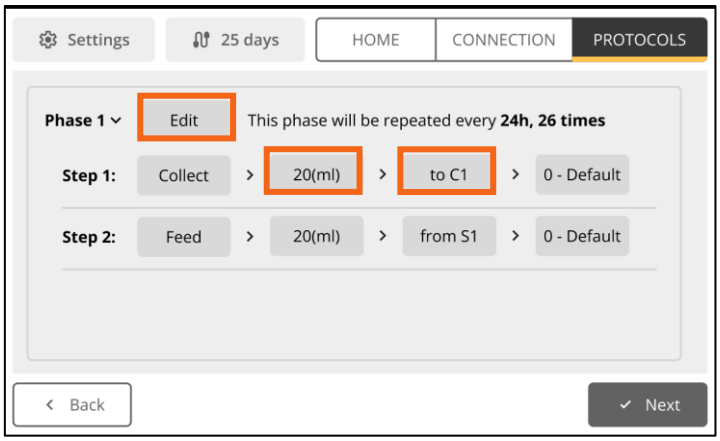
   Scroll through the list by swiping up on the screen.

   ℹ If the protocol you are looking for does not appear, it means that it is not compatible with the selected target type.



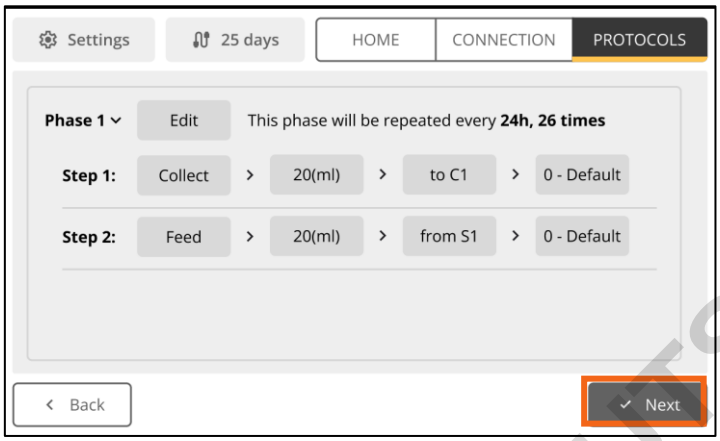
6. Click on the ‘Next’ button.

DOMINIQUE DUTSCHER SAS

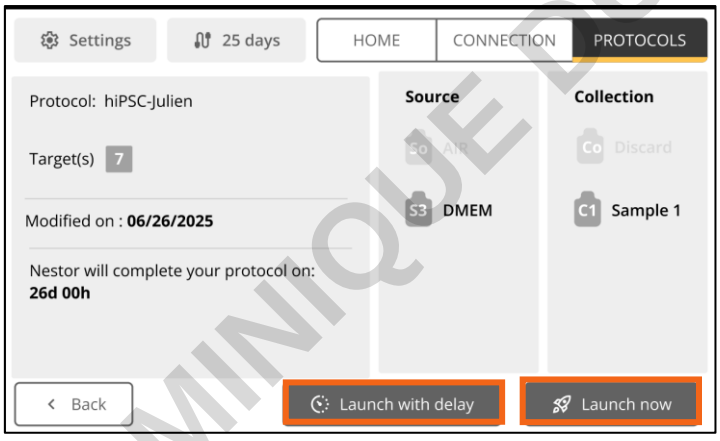


You can modify the loop parameters at any time by clicking the “Edit” button.

The volumes and lines used can also be adjusted using the corresponding buttons.



7. Click on the ‘Next’ button.



The system displays a summary of the selected protocol, including:

- the targets involved,
- the last modification date,
- the total estimated duration,
- the sources and collection bottles used.

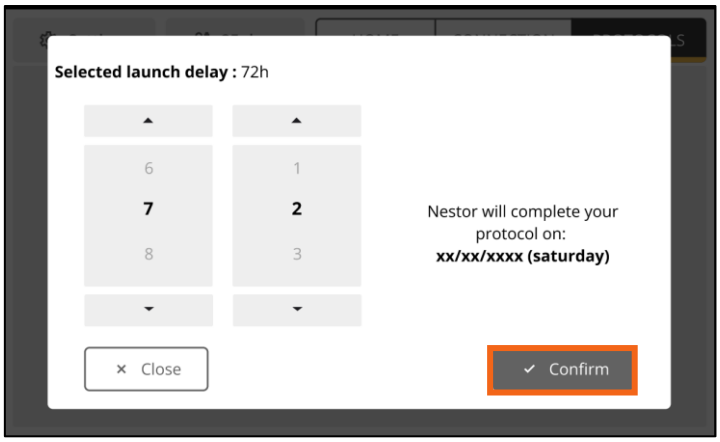
8. Click “Launch now” to start the protocol immediately, or “Launch with delay” to add a delay before the first step begins.

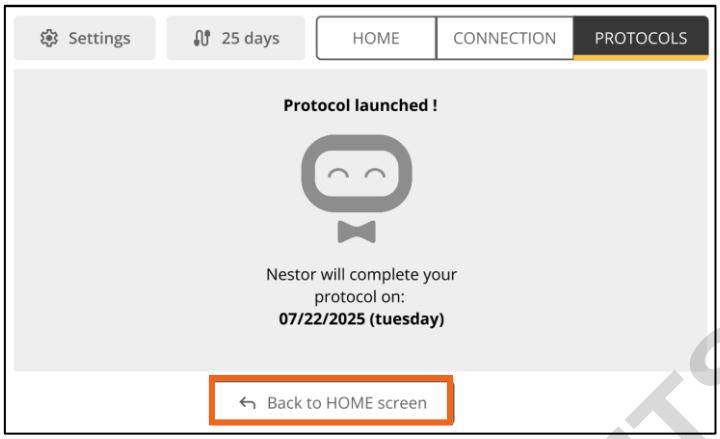
To add a delay before starting the protocol, use the dial to set the delay in hours.

The system will automatically display the estimated end date and day.

Click the “Confirm” button to validate.

DOMINIQUE DUTSCHER SAS



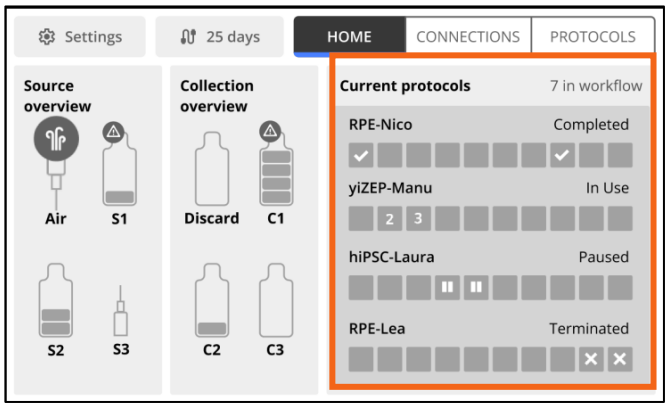


The system confirms that the protocol has been successfully started and displays the estimated end date and day.

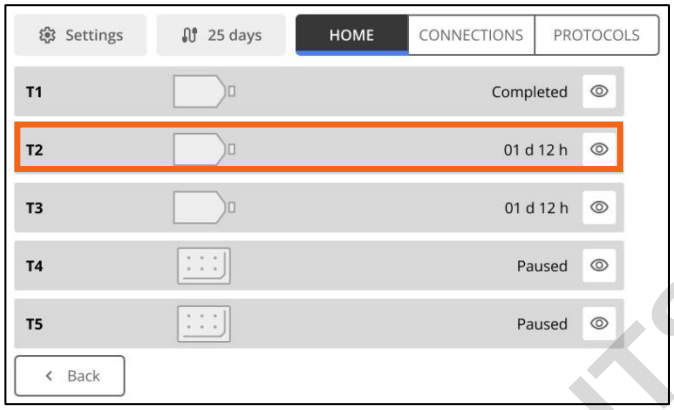
9. Click “Back to HOME screen” to return to the home screen.

DOMINIQUE DUTSCHER SAS

TERMINATE PROTOCOL



1. Click on the “Current protocols” area.



2. Select the target from the list by clicking on the eye icon.

ℹ To scroll through the list, swipe up on the screen.



3. Click on the “Terminate target” button.



4. Click on the “Next” button.

DOMINIQUE DUTSCHER SAS



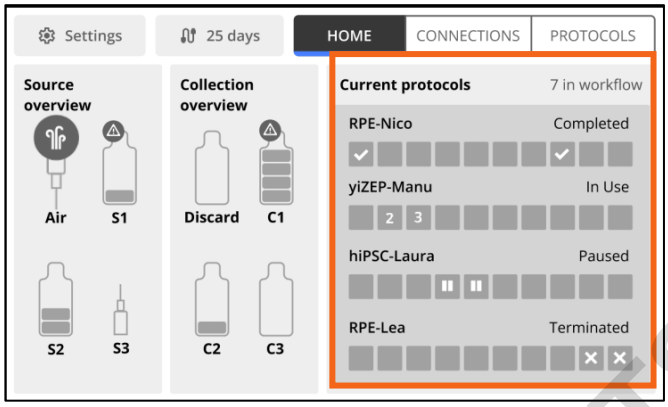
5. Click on the “Done” button.

DOMINIQUE DUTSCHER SAS

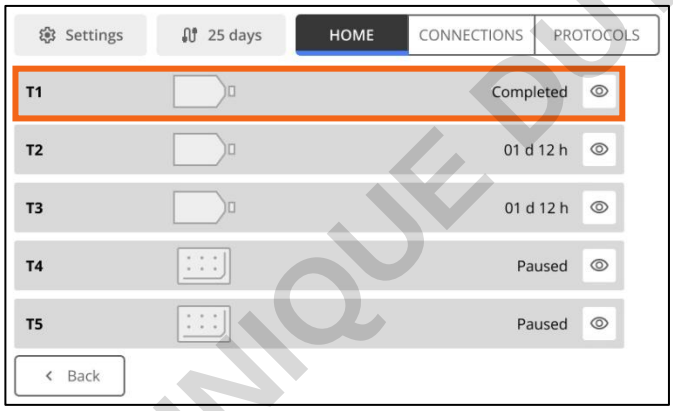
PROTOCOL COMPLETED



1. Plug the USB drive into the Input USB port.

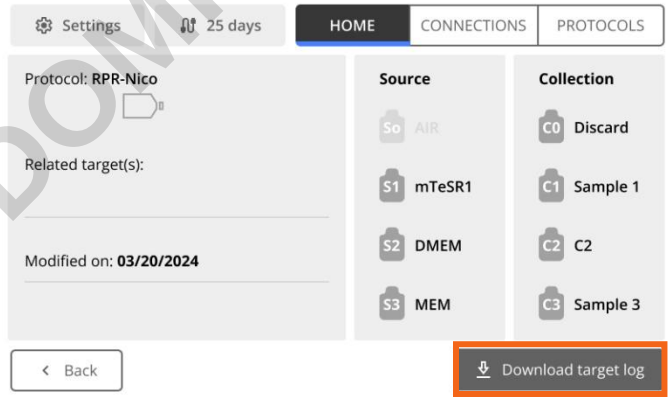


2. Click on the “Current protocols” area.



3. Select the target from the list by clicking on the eye icon.

ℹ To scroll through the list, swipe up on the screen.



4. Click on the “Download target log” button.

DOMINIQUE DUTSCHER SAS

UPDATE

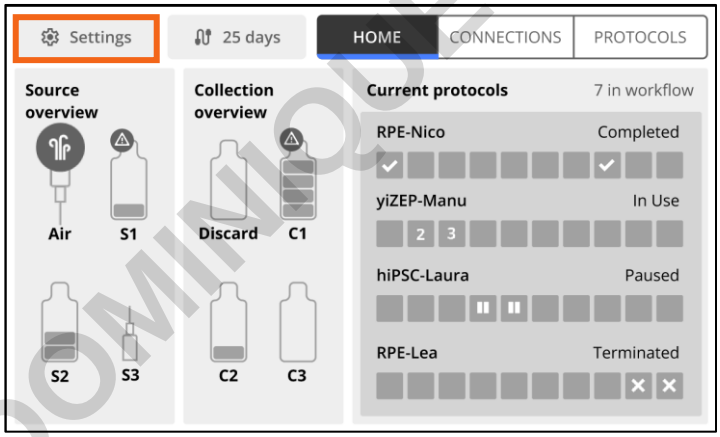
Have the provided USB drive ready, onto which you have downloaded the update file from the Cellaven website.

The update files must be stored on the USB drive in the following directory: NestorData/Updates.

Each update file is stored in a specific folder: Fridge Unit, Main Board, Nestor App, Power Hub, and User Interface.

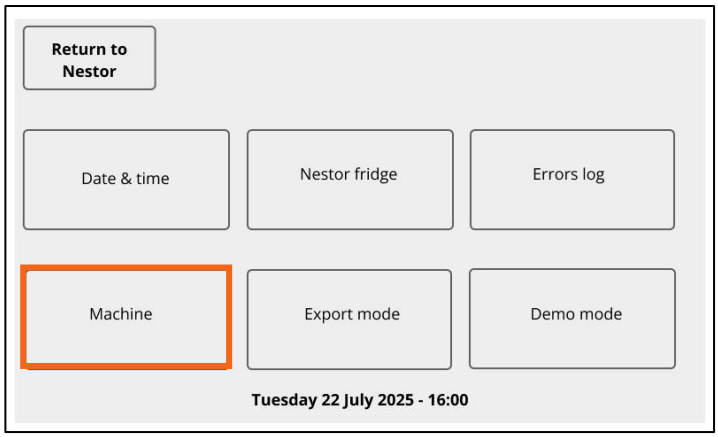
MAIN BOARD



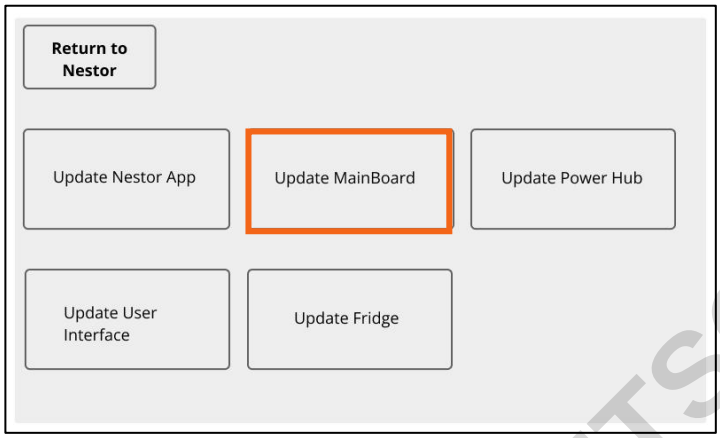


1. Make sure all targets have completed their protocol or use the “Terminate protocol” procedure.
2. Perform the “Tubing set Removal” procedure.
3. Plug the USB drive into the Input USB port.
4. Click on the ‘Settings’ button.

DOMINIQUE DUTSCHER SAS



5. Click on the “Machine” button.



6. Click on the “Update Main Board”.

7. Click on the “Update Main Board” button.

The update will run automatically.

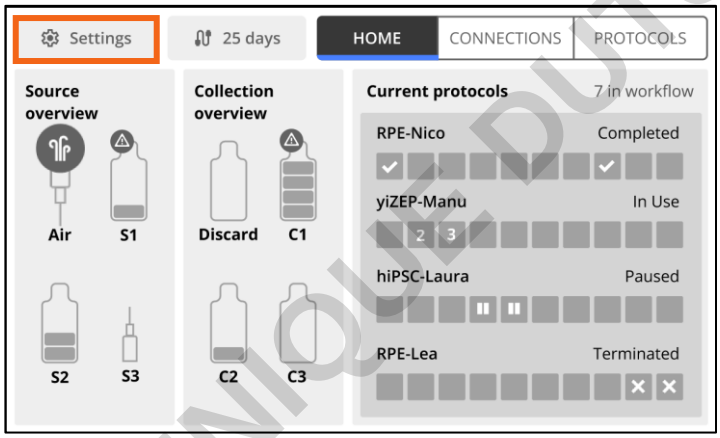
8. Click on the “Done” button.

9. Remove the USB drive and store it.

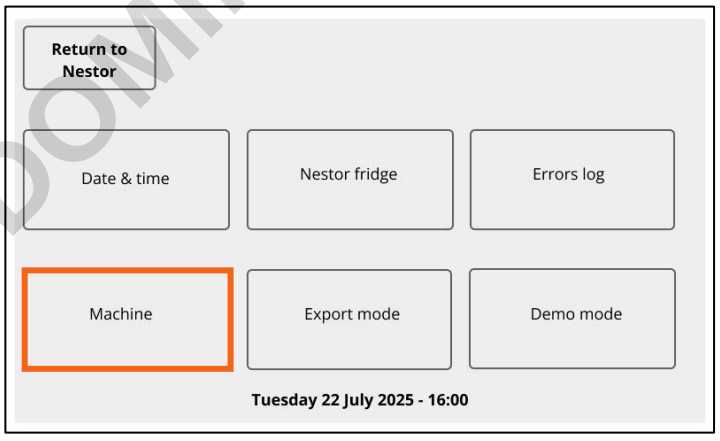
DOMINIQUE DUTSCHER SAS



1. Make sure all targets have completed their protocol or use the “Terminate protocol” procedure.
2. Perform the “Tubing set Removal” procedure.
3. Plug the USB drive into the General USB port.

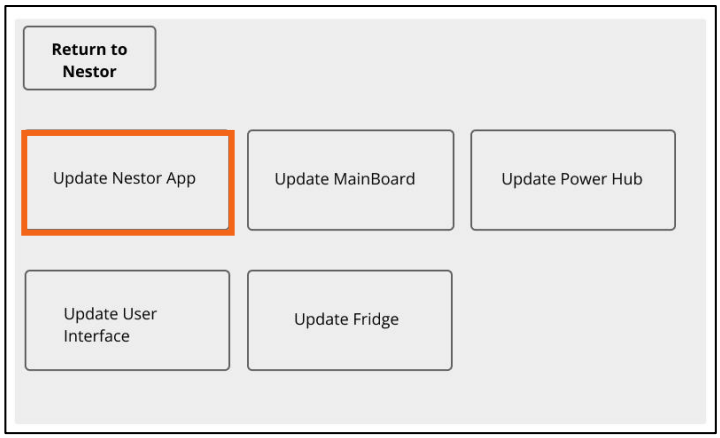


4. Click on the ‘Settings’ button.



5. Click on the “Machine” button.

DOMINIQUE DUTSCHER SAS



6. Click on the “Update Nestor App” button.

7. Click on the “Update Nestor App” button.

The update will run automatically.

8. Click on the “Done” button.

9. Remove the USB drive and store it.

USER INTERFACE

This procedure must be performed after Nestor has been shut down.

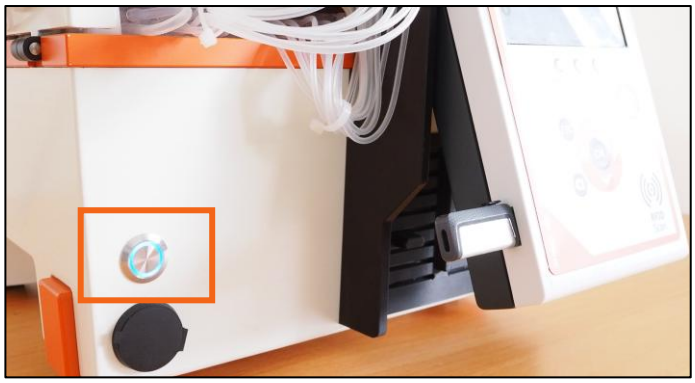


1. Make sure all targets have completed their protocol or use the “Terminate protocol” procedure.

2. Perform the “Tubing set Removal” procedure.

3. Plug the USB drive into the Input USB port.

DOMINIQUE DUTSCHER SAS





4. Press the and Power button of Nestor and the Escape button and simultaneously.

The update will run automatically, and Nestor will then start up normally.

5. Remove the USB drive and store it.

DOMINIQUE DUTSCHER SAS

TROUBLESHOOTING

OVERFLOW OF THE DISCARD BOTTLE

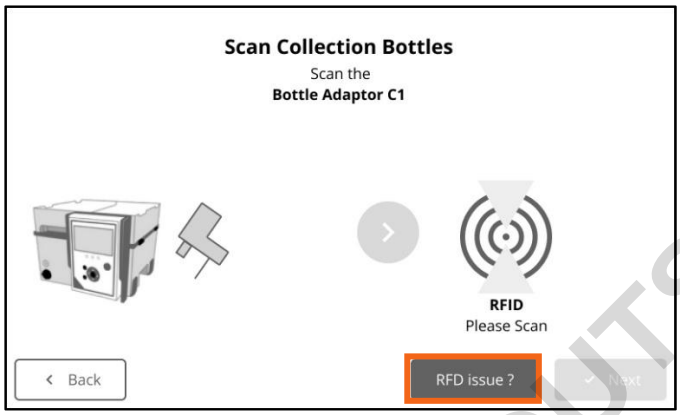
In the event of an overflow of the Discard bottle, liquid may flow back into the vacuum line and compromise the efficiency of the filter.

If this occurs, the filter must be replaced to ensure system safety and performance.

Please refer to the procedure “Vacuum Tube Installation” to perform this operation.

RFID ISSUE

Use this procedure in case of an RFID scanning malfunction.



1. Click the “RFID issue?” button.

2. Click on the area in the center of the screen.

3. Utilisez le clavier pour entrer le code correspondant au connecteur que vous essayez de scanner.

ℹ The list of codes is available in the “**Erreur ! Source du renvoi introuvable.**” section.

4. Click on the ‘Next’ button.

NESTOR LED INDICATORS

Nestor is equipped with several LED indicators located beneath the control panel. These LEDs provide real-time information about the machine’s operational status, protocol execution, and communication with the Cooling Unit.

SYSTEM LED INDICATOR

This LED reflects the overall status of Nestor.

DOMINIQUE DUTSCHER SAS

Color	Meaning
Green (steady)	The system is powered on and fully operational.

PROTOCOLS LED

Color	Meaning
Green (steady)	One or more protocols are currently running.
Green (blinking)	At least one vessel has reached the status “Completed” or “Terminated”.
Orange (steady)	At least one vessel is currently “Paused”.

COOLING UNIR LED

This LED will mirror the status of the Refrigeration Unit and follow its LED color codes.

Note: This feature is not yet active and will be implemented in a future software update.

FRIDGE UNIT LED INDICATORS

The Refrigeration Unit is equipped with two LED indicators that provide real-time information about the system status and the cooling performance.

These indicators help users quickly identify normal operation, warnings, or critical issues.

SYSTEM LED INDICATOR

This LED reflects the global status of the Refrigeration Unit.

Color	Meaning
Green (steady)	System operating normally.
Orange (steady)	Warning – a non-critical issue requires attention.
Red (steady)	Critical fault – immediate action required.

COOLING LED INDICATOR

This LED provides temperature-related information and indicates how the cooling system is regulating.

Color	Meaning

DOMINIQUE DUTSCHER SAS

Blue (steady)	Temperature is stable and within the regulation range.
Blue (pulsing)	Active cooling. The system is regulating to reach the setpoint.
Orange (steady)	Regulation paused (door open)
Off	Temperature is above the allowed regulation margin.

LED COMBINATIONS

Certain system events trigger specific LED combinations to alert the user.

- **Loss of 24V – Battery Backup Active**

  The fridge switches off its cooling function.

  - Cooling LED : Orange blinking
  - System LED : Orange steady This indicates the unit is running on battery only.

- **Anti-Freeze Safety**

  Triggered when the internal temperature approaches 0°C.

  - Cooling LED: Red steady
  - System LED: Orange steady

- **Overheating Protection**

  Triggered if one of the sensors detects excessive temperature. Cooling regulation is automatically stopped.

  - System LED: Orange steady

POWER HUB LED INDICATORS

The Power Hub is equipped with a status LED that indicates the connection and operating state of the connected devices.

LED Color	**Meaning**
Green (steady)	A peripheral device is properly connected and powered.

DOMINIQUE DUTSCHER SAS

Off	No peripheral device is connected.
Red (steady)	Error or malfunction detected on the connected device or on the Power Hub.

DOMINIQUE DUTSCHER SAS



less cell work, more cell science

DOMINIQUE DUTSCHER SAS