



ALLIANCE
BIO EXPERTISE

PERISTALTIC PUMP DOSYWEL UP!



USER MANUAL

Revision 2



Declaration of Conformity DOSYWEL UP!
SAS ALLIANCE BIO EXPERTISE, 19 rue Louis Blériot 35170 BRUZ,
France

Declares that the here below material complies with the following European directives.

Description	Models
DOSYWEL UP!	DOSW1201
Is compliant with :	

EU Directives :

Low voltage equipment	2014/35/UE
Electromagnetic compatibility	2014/30/EU
Waste electrical and electronic equipment	2012/19/EU

EU Standards :

Safety requirements for electrical equipment for laboratory use	EN61010-2-081: 2015 EN 61010-1:2010 A1 :2019
Particular requirement for automatic and semi-automatic laboratory equipment for analysis and other purposes	EN 61010-2-81:2013
Electrical equipment for laboratory use-EMC requirement	EN 61326-1 : 2021 EN301489-3 V2.3.0 : 2022 ETSI EN301489-1 V2.2.3 : 2019 ETSI EN301489-1 V2.2.0 : 2017

The declaration has been issued by the manufacturer.

The person responsible of the declaration is :

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Position	:	Président Alliance Bio Expertise sas

Bruz, April 25th, 2024



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Pictograms used in the manual

To make this manual easier to read, the following symbols indicate specific information:



This symbol indicates a prerequisite prior to an action, or an operation.



This symbol indicates an informative message.



This symbol indicates an important message for the device proper operation.



This symbol indicates an important message concerning the user's safety.

Disposal and recycling



This device is composed of metal, plastic materials, electric components and electronic components.

The 2012/19/UE directive on recovering and recycling Waste from Electric and Electronic Equipment (WEEE) requires Electric and Electronic Equipment (EEE) to be recycled at the end of its life.

Therefore, end users must dispose of electric and electronic waste at a waste management facility or a dedicated collection site.

For more information about returns, please contact the equipment manufacturer.

Document History:

Version	Modifications
1	Creation
2	Additional functionalities integration (back up, updates, pump adjustment, peripherals)

Due to the informative nature of this manual, ALLIANCE BIO EXPERTISE reserves the right to make changes to the document without prior notice.

Warranty

ALLIANCE BIO EXPERTISE hereby certifies that the device displays the characteristics set out in this manual on delivery. Machines are guaranteed against manufacturing defects and defective components for a period of twelve months from the dispatch date.

ALLIANCE BIO EXPERTISE shall carry out possible repairs of components, within its premises, during the warranty period. All components or devices experiencing any kind of malfunction must be returned to ALLIANCE BIO EXPERTISE at the cost of ALLIANCE BIO EXPERTISE's representative or the client, if necessary.

The warranty shall not be valid for issues relating to transport, accidents, incorrect use, internal interference caused by a poor-quality electricity network or non-authorized users.


General safety instructions



The DOSYWEL UP! is a mechanical device. For this reason, it is essential to follow the safety instructions described in this user's manual.





- Do not modify the device.
- The DOSYWEL UP! must undergo annual preventive maintenance, carried out by trained personnel authorized by ALLIANCE BIO EXPERTISE.
- Defective parts must only be replaced with original spare parts supplied directly or indirectly by ALLIANCE BIO EXPERTISE.
- The power supply must only be replaced with one that can be supplied directly or indirectly by ALLIANCE BIO EXPERTISE.

Risks and prevention

Symbol	Risk	Cause	Component	Prevention and Instructions
--	Electric shock	Short-circuit	Power supply	The device must be plugged to a grounded electrical outlet.
	Pinching	Pump head opening and closing	Pump head	Follow the instructions to install the tubing into the pump head without any risk.

Unpacking

For optimal operation, please follow the following instructions when unpacking your device.

-  Unpack the device in a clean and accessible area.
-  Remove all accessories shipped with the device.
 - Power cord and power supply
 - 3.2mm tubing set with dispensing nozzle
 - USB key containing the user's manual
 - Conformity report
 - Any additional accessory or consumable that may have been ordered
-  Lift up the pump out of the box by holding it by its handle.
-  Keep the packaging in case the device needs to be moved.

Installing your device

Environment precautions



Make sure that you unpacked your device according to the unpacking guidelines.

Your pump needs to be installed in a place respecting the following environmental conditions:

- Indoor
- On a clean, dry, and stable bench
- Temperature range: from 5°C to 45°C (41°F to 113°F)
- Maximum humidity: 80%

Connecting the device to the power supply

- The device must be connected to an electrical installation complying with the country's applicable standards and specifications indicated on the manufacturer's plate.
- Connecting to any other type of power supply may disrupt the device or surrounding machines.
- The installation must be equipped with protections against over-currents, voltage and ground faults:
 - The power supply of the device must be assured by a grounded outlet, and a safety device must guarantee automatic power-off in case of faulty insulation. A power supply equipped with a sufficiently powerful differential circuit breaker would meet this requirement.
 - The outlet must be immediately identifiable and easily reachable by the operator.
- Do not install the equipment next to a source of heat or source of humidity.

Turning on and off the device

To turn on and off the device, press the  button for a few seconds and release.

The Home menu is displayed:



Presentation

Overview



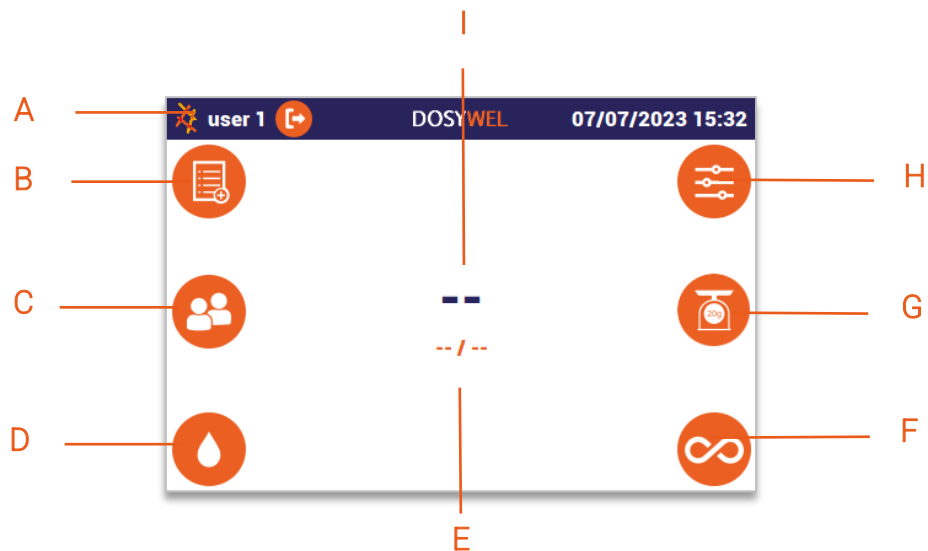
A	Side buttons
B	Touch screen
C	Pump head

Rear view



A	Ethernet port
B	2 x 2 USB ports
C	Power supply port
D	Additional pump port (DILUPUMP UP! only)

Touch screen



A	User login identification / logout button
B	Access to Program management (creation/selection/edition/deletion)
C	Access to User management (creation/selection/edition/deletion)
D	Access to Media management (creation/selection/edition/deletion)
E	Ongoing program tracking
F	Pump priming
G	Access to Calibration menu
H	Access to Settings (Maintenance menu, Calibration menu...)
I	Dispensing status

Setting up your DOSYWEL UP!

Setting the pump head

The pump head clamps ensure that tubing is properly inserted and not damaged during operation.



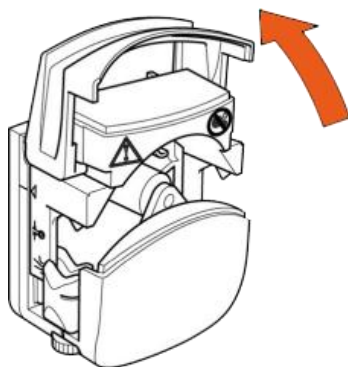
By default, the pump head is set on both sides to operate with the following tubing:

- 3.2 mm inner diameter
- 1.6 mm tubing thickness

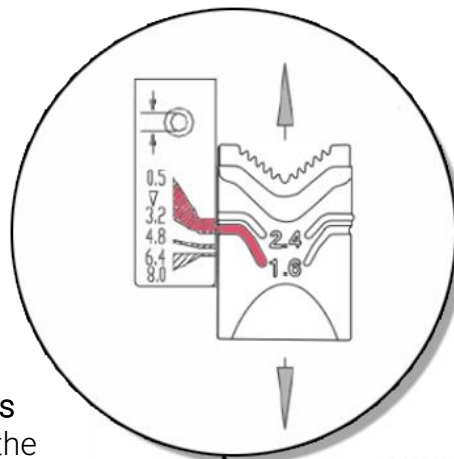
Clamps can be adjusted to fit other tubing diameters (3.2, 4.8, 6.4 or 8 mm) by using the knobs at the bottom.



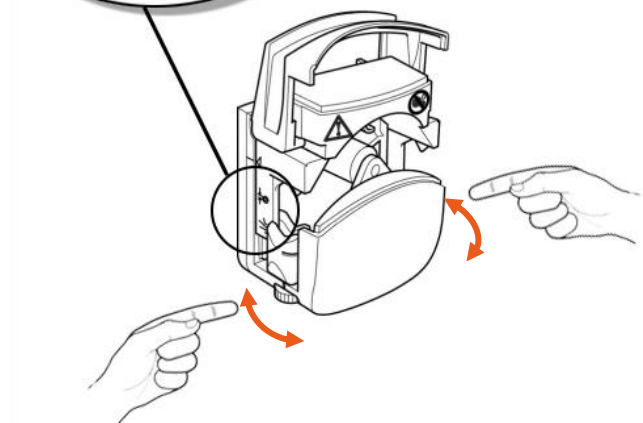
Make sure that the device is switched off before any operation.



1. Open the pump head.



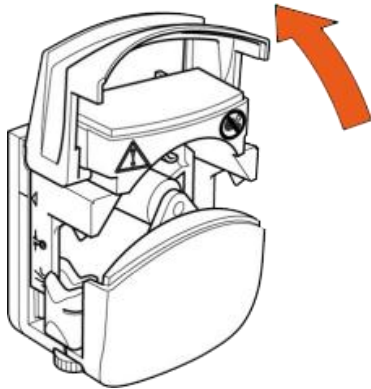
2. Turn the knobs **on both sides** of the pump head to adjust the clamps according to tubing diameter.



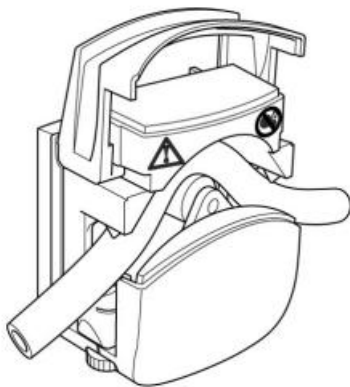
Installing the tubing set(s)



Make sure that tubing sets and their dispensing nozzle are sterilized.



1. Open the pump head.



2. Insert the tubing into the pump head so that it comes out of the pump head over the clamps on both sides.



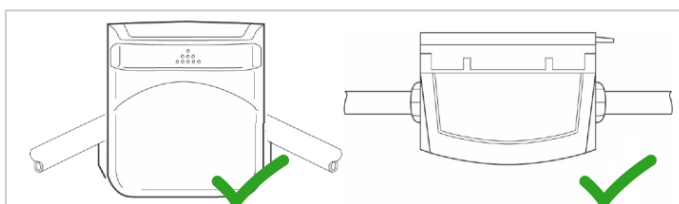
The tubing set is composed of three sections:

- A central section, called the "rotor section" indicated by 2 connectors.
- 2 tubing sections.

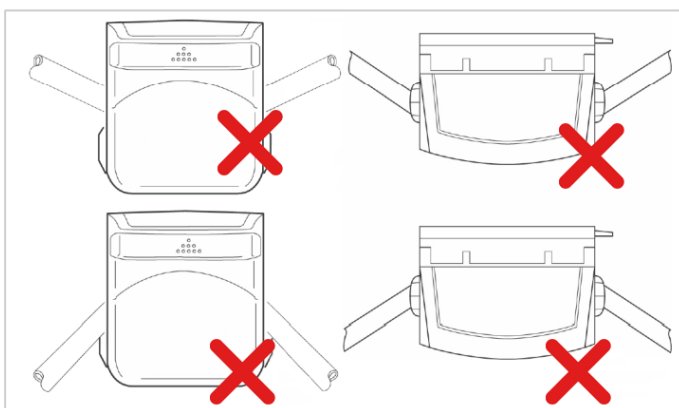


The central rotor section should be over the rollers and centered.

3. Close the pump head and make sure that tubing comes out of the pump head over the clamps on both sides.






Tubing bends downwards.



It must not be bent upwards or towards the front or back.


Connecting the tubing set to a media source

According to your media source, you can use different accessories to connect to your tubing set.

Media Source	Accessory required	
Broth bags		Trocara for broth bags (DILW2007)
Broth bottles		Sampling nozzle for broth bottle with filter (DILW2006)
Media preparator		Sampling nozzle (on request, according to the preparator used)

Priming the pump

Once tubing is properly installed, you can prime the pump to avoid air bubbles when dispensing.

On the bottom right corner of the screen, press and hold  to activate the pump and start priming. Keep on pressing until no bubble can be seen within tubing.



Device settings

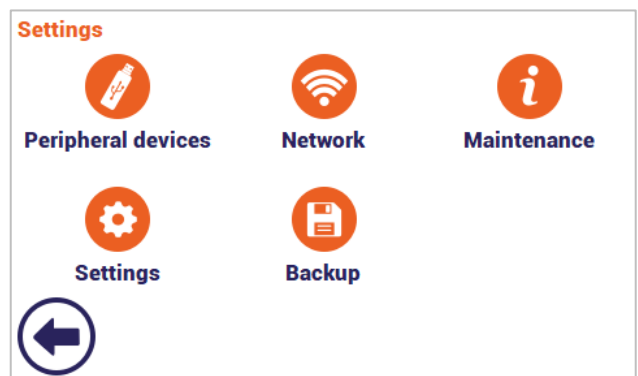
Language / Date and time / Time Zone

To set up your DOSYWEL UP!, go to the parameters menu to define the language, date, time, and time zone.

1. From the Home menu, press




2. Press  to access the **Settings** menu.



- To select your time zone:**
- a) Press the Time zone field.
 - b) Use the side arrows to select your time zone.

- To select your language:**
- a) Press the Language field to select the language.
 - b) Turn the device off and turn it back on to activate.

- To set date and time:**
- a) Press the fields to be modified.
 - b) Enter your settings.
 - c) Press  to confirm.



Advanced settings

Advanced settings are parameters defined to ensure the best experience to most users.

Protected by a password, this menu can be accessed by contacting your ABE technical support.

Managing media

Creating a media

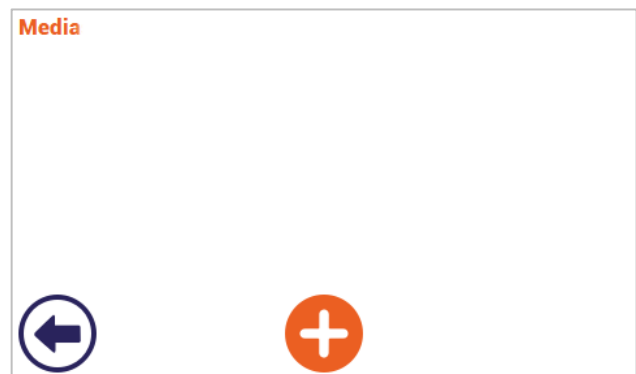
You can create 3 types of media that can be used in preset programs:

- **Media**
Classic ready to use media.
- **Concentrate**
Concentrated media requiring the addition of sterile water for media reconstitution (additional Dilupump Up! required).
- **Water for concentrate**
Sterile water used for concentrated media reconstitution (mandatory if using a concentrated media).

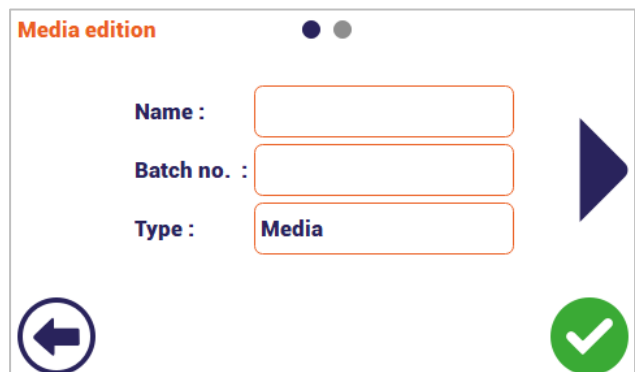
1. From the Home menu,
press .



2. Press .



3. Press the **Name** field.




Media edition

Name :

Batch no. :

Type :

4. Enter the new media name and press  to confirm.

Name :

1	2	3	4	5	6	7	8	9	0
a	z	e	r	t	y	u	i	o	p
q	s	d	f	g	h	j	k	l	m
w	x	c	v	b	n	#!\$	↑		



5. Press the **Batch no.** field and enter the batch number (optional).

Media edition

Name :

Batch no. :



Type :

6. Press  to confirm.

Batch no. :

1	2	3	4	5	6	7	8	9	0
a	z	e	r	t	y	u	i	o	p
q	s	d	f	g	h	j	k	l	m
w	x	c	v	b	n	#!\$	↑		



7. Press the **Type** field to select the media type:
- Media
 - Concentrate
 - Water for concentrate


Media edition

Name :



Batch no. :

Type :

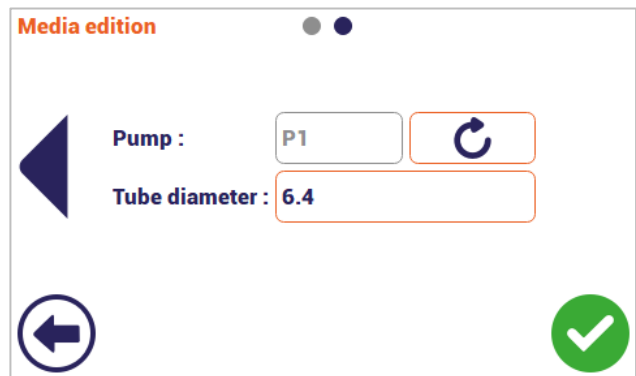
8. Press  to access the second edition page.

9. Press the **Pump** field to select the pump that will be assigned to the media. If no additional pump is connected, by default P1 is selected.


10. Press  or  to select the direction of the pump rotation (clockwise or counterclockwise).

11. Press the **Tube Diameter** field to select the tube diameter of your tubing set:



- 1.6
- 3.2
- 4.8
- 6.4
- 8.0

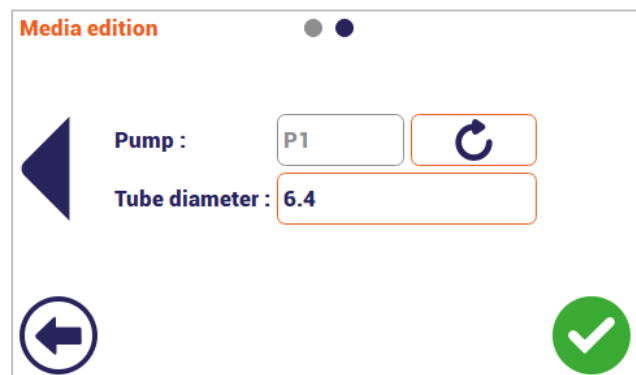


Media edition


Pump : P1 

Tube diameter : 6.4



 



Media edition

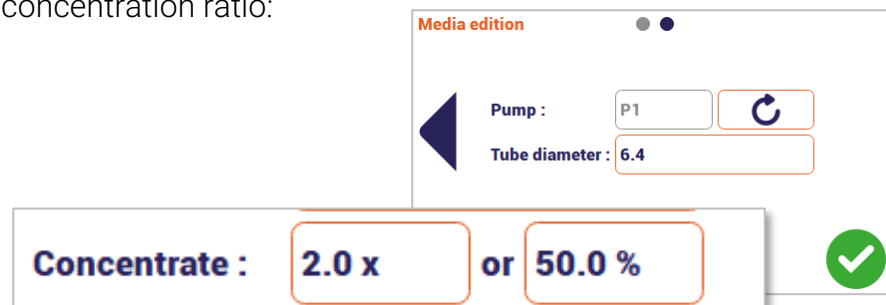
Pump : P1 

Tube diameter : 6.4


 




When creating a concentrate, an extra field appears to define the concentration ratio:



Media edition

Pump : P1 

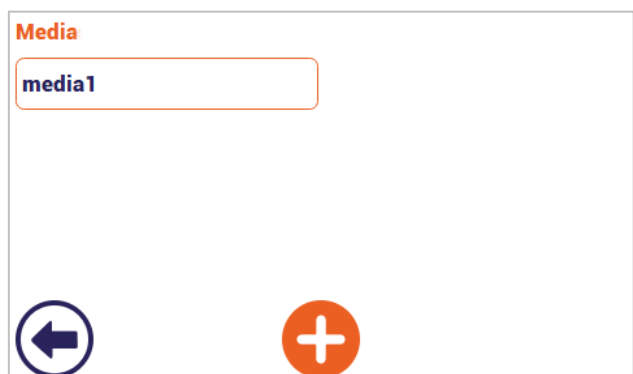
Tube diameter : 6.4

Concentrate : 2.0 x or 50.0 % 

Enter either the concentration rate or the reconstitution percentage for the used solution.



12. Press  to confirm.

The newly created media is displayed on the **Media** page.



Media

media1

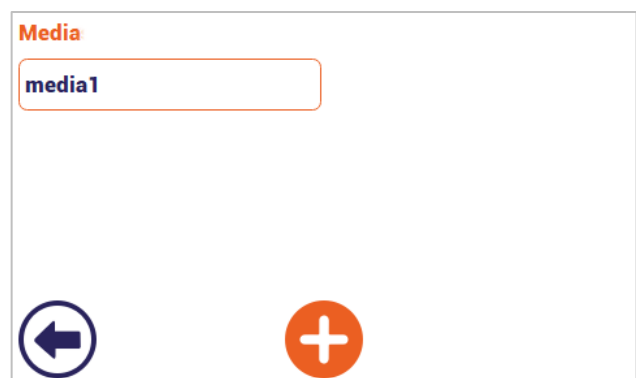
 

Modifying a media

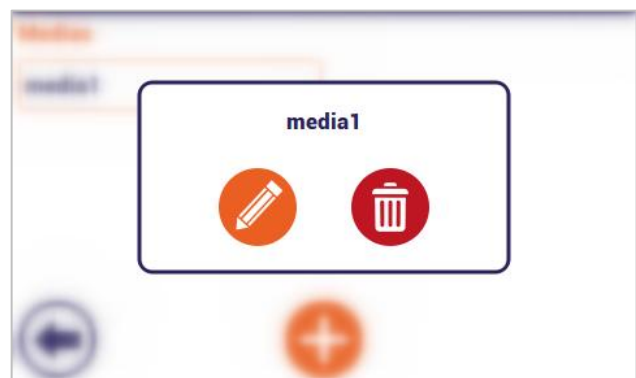
1. From the Home menu, press .




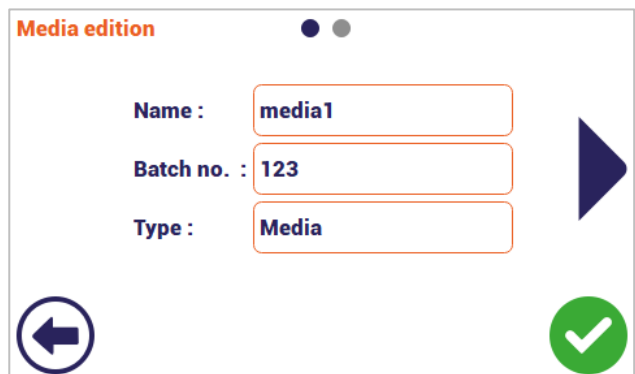
2. Press and hold the media to be modified.



3. Press .



4. Press the field(s) to be modified.
5. Modify as required and press  to confirm.

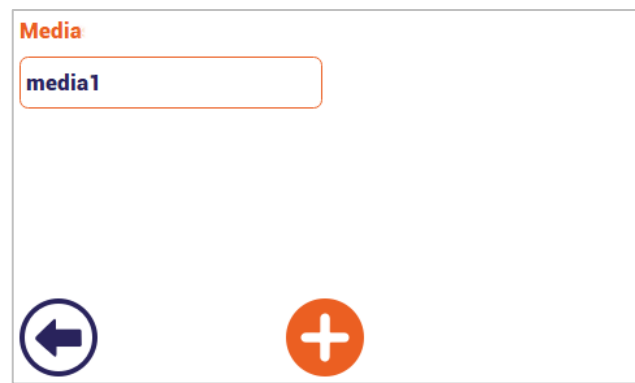


Deleting a media

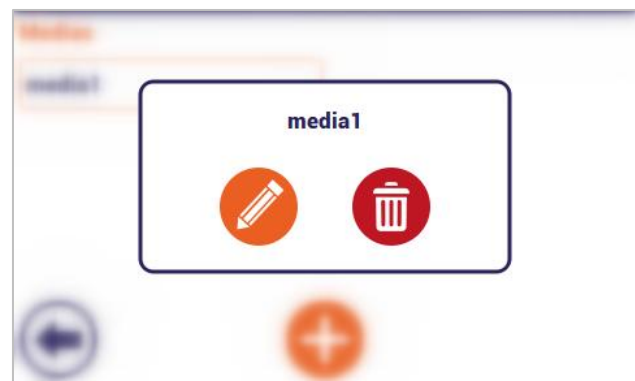
1. From the Home menu, press .



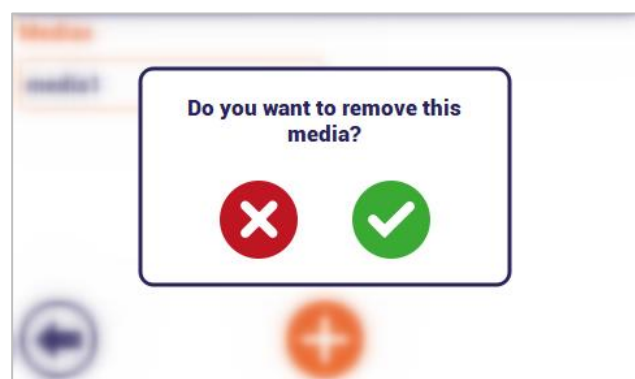
2. Press and hold the media to be deleted.



3. Press .



4. Press  to confirm.



Managing programs

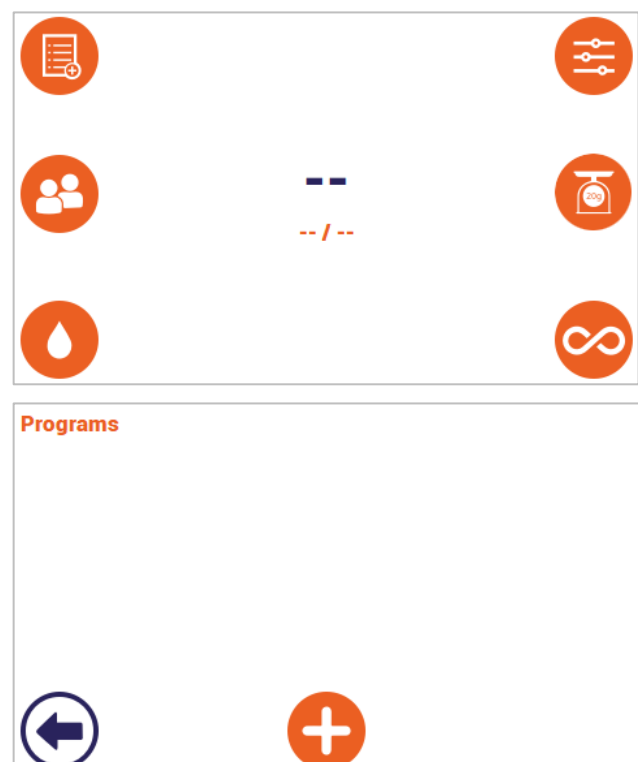
3 types of programs can be managed with your DOSYWEL UP!:

- Dosing program
Dispensing of a precise volume, dose by dose.
Possibility to choose a total number of doses or a total volume.
Possibility of automatic dispensing.
Possibility of calibration at the beginning of the program and/or during a set number of doses.
- Continuous program
Dispensing of a media at a defined speed for a defined duration in continuous mode.
- Flow rate program
Dosing of a defined number of doses with a defined constant flow rate.
Possibility to choose a total number of doses or a total volume.
Possibility of automatic dispensing.
Possibility of calibration at the beginning of the program and/or during a set number of doses.

Creating a Dosing program

1. From the Home menu,
press .

2. Press .



- Press the **Name** field and enter the new program name.

- Press  to confirm.



Program edition

Name :

Mode :



Media :

First step :

Name :

1	2	3	4	5	6	7	8	9	0
a	z	e	r	t	y	u	i	o	p
q	s	d	f	g	h	j	k	l	m
w	x	c	v	b	n	#!\$			↑

- Press the **Mode** field to select Dosing.



Program edition

Name :


Mode :


Media :

First step :

- Press the **Media** field to select the media to be used.

 When a concentrate type media is selected, the **First step** field is enabled, to let you choose which liquid you wish to dispense first: **Concentrate** or **Water for concentrate**.

- Press  to access the second edition page.



Program edition

Name :

Mode :


Media :

First step :

8. Press the **Dose** field.

 Press  to empty the field before entering the value.

9. Enter the dose volume to be dispensed and press .



Program edition


Dose : 9.0 ml

Number of doses: 1 dose(s)

or total of: 9.0 ml



Speed : 75 %

Dose : 9.0 ml 

(Min: 0.1 | Max: 9999.9 ml)

1	2	3	4
5	6	7	8
9	0	.	

You can either enter a **Number of doses** required or a **total volume** to be dispensed.



Program edition

Dose : 8.0 ml





Number of doses: 1 dose(s)


or total of: 9.0 ml

Speed : 75 %



Entering a number of doses Entering a total volume


- | | |
|--|---|
| a. Press the Number of Doses field. | a. Press the Total volume field. |
| b. Press  to empty the value. | b. Press  to empty the value. |
| c. Dial the number of doses required and press  . | c. Enter the total volume to be dispensed and press  . |

Number of doses: 20 dose(s) 

(Min: 1 | Max: 9999 dose(s))



1	2	3	4
5	6	7	8
9	0	.	

Total volume : 160 ml 

(Min: 0.1 | Max: 50000.0 ml)

1	2	3	4
5	6	7	8
9	0	.	

10. If required, press the **Speed** field to modify it.

Program edition

Dose : 8.0 ml


Number of doses: 20 dose(s)


or total of: 160.0 ml

Speed : 75 %

◀ ▶

⏮ ⏭

11. Press  to empty the value.

Speed : 75 % 


(Min: 5 | Max: 100 %)

1	2	3	4
5	6	7	8
9	0	.	

⏮ ⏭

12. Enter the new value to define the pump speed according to your requirements.

Please see [recommendations](#) given at the end of this manual.


Speed : 80 % 

(Min: 5 | Max: 100 %)

1	2	3	4
5	6	7	8
9	0	.	

⏮ ⏭

13. Press  to confirm.

14. Press  to access the 3rd edition page.

Program edition

Dose : 8.0 ml

Number of doses: 20 dose(s)


or total of: 160.0 ml

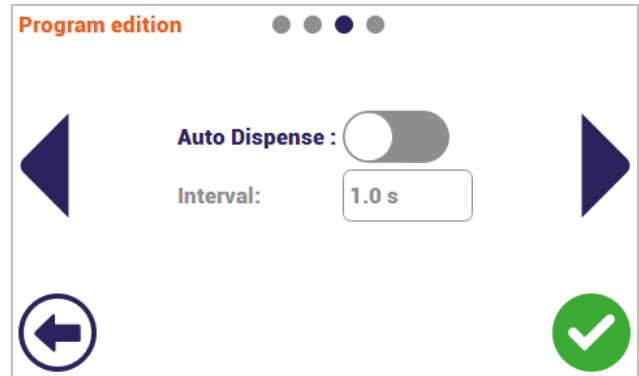
Speed : 80 %

◀ ▶

⏮ ⏭

15. Enable or disable the **Auto dispense** option.


 Auto Dispense is a hand-free dispensing mode, using a defined time interval.
If enabled, set the interval between each dispensing.




Program edition

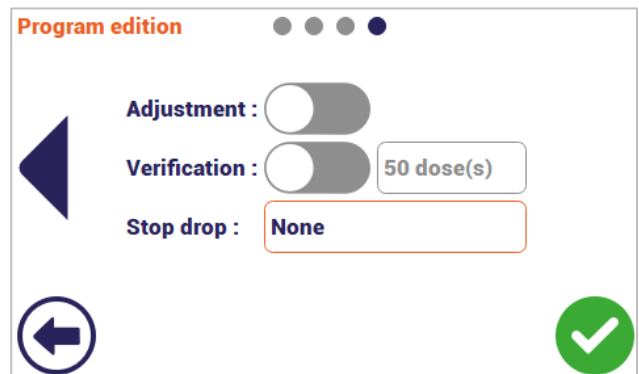
Auto Dispense : ☒

Interval: 1.0 s

16. Press  to access the 4th edition page.

17. Enable or disable **Adjustment**.

 If enabled, an adjustment will be required before starting the program.




Program edition

Adjustment : ☒


Verification : ☒ 50 dose(s)

Stop drop : None

18. Enable or disable **Verification**.

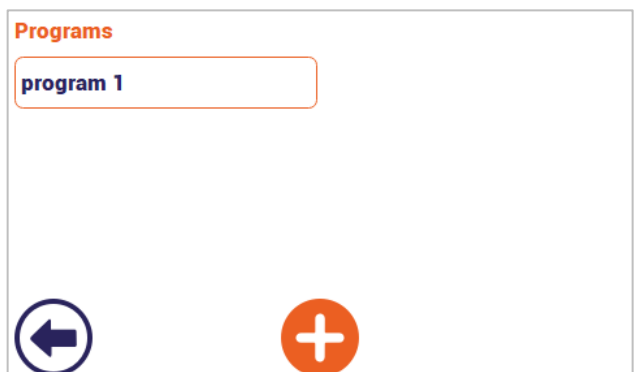
 If enabled, a calibration will be required after the defined number of doses.

19. Press the **Stop drop** field to select either **None**, **Short** or **Extended**

 **Stop Drop** feature is a light pump roll back that avoids the final drop between 2 doses that may occur with some types of media.

20. Press  to confirm.

The new program is added.



Programs

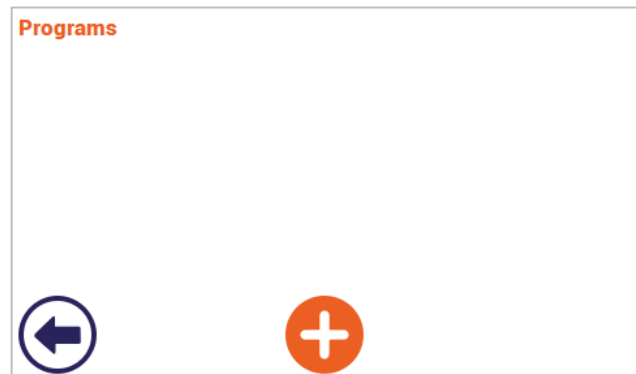
program 1

Creating a Continuous mode program

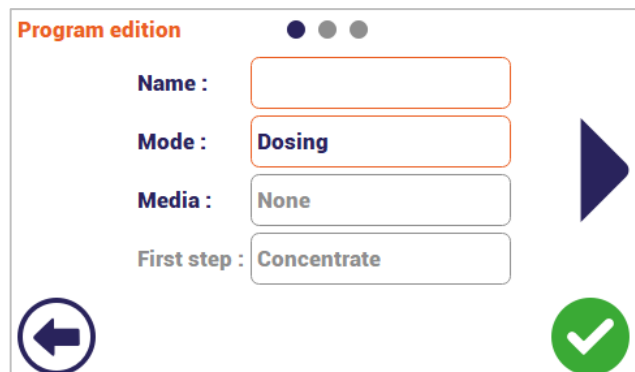
1. From the Home menu,
press .



2. Press .



3. Press the **Name** field and enter
the new program name.



Program edition

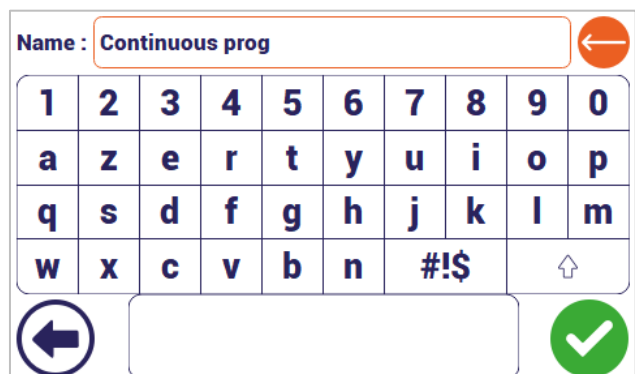
Name :

Mode : **Dosing**

Media : **None**

First step : **Concentrate**

4. Press  to confirm.



Name :

1	2	3	4	5	6	7	8	9	0
a	z	e	r	t	y	u	i	o	p
q	s	d	f	g	h	j	k	l	m
w	x	c	v	b	n	#!\$		↑	

5. Press the **Mode** field to select **Continuous**.

Program edition

Name : Continuous prog

Mode : Continuous

Media : None

First step : Concentrate

Navigation icons: back, forward, confirm

6. Press the **Media** field to select the media to be used.

Program edition


Name : Continuous prog

Mode : Continuous

Media : media1

First step : Concentrate

Navigation icons: back, forward, confirm

7. Press  to access the second edition page.

8. Press the **Duration** fields to define the program duration.


Program edition


Duration : 5 min 0 s

Speed : 75 %

Navigation icons: back, forward, confirm

9. Press  to empty the field before entering the value.

10. Enter the duration value and press  to confirm.

Duration : 5 min 

(Min: 0 | Max: 60 min)

1	2	3	4
5	6	7	8
9	0	.	

Navigation icons: back, confirm


11. Press the **Speed** field to define the pump speed according to your requirements.

Program edition

Duration : 5 min 0 s

Speed : 75 %

Navigation icons: back, forward, home, confirm


12. Press  to empty the value.


Speed : 80 % 

(Min: 5 / Max: 100 %)


1	2	3	4
5	6	7	8
9	0	.	

Navigation icons: back, confirm

13. Enter the speed value and press  to confirm.

14. Press  to access the third edition page.

15. Press the **Stop drop** field to select either **None**, **Short** or **Extended**

 **Stop Drop** feature is a light pump roll back that avoids the final drop between 2 doses that may occur with some types of media.

Program edition

Stop drop : None

Navigation icons: back, confirm

16. Press  to confirm.

The newly created program is added.

Programs

Continuous prog

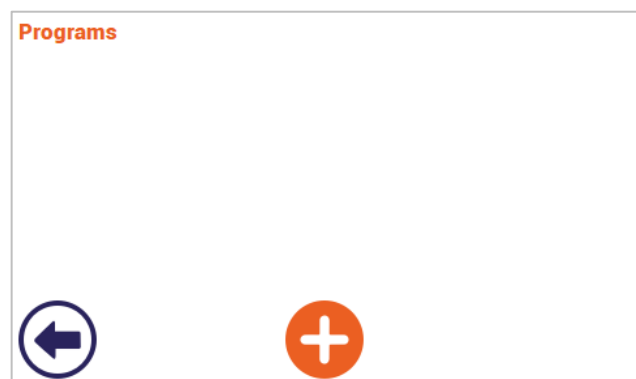
Navigation icons: back, add

Creating a Flow rate program

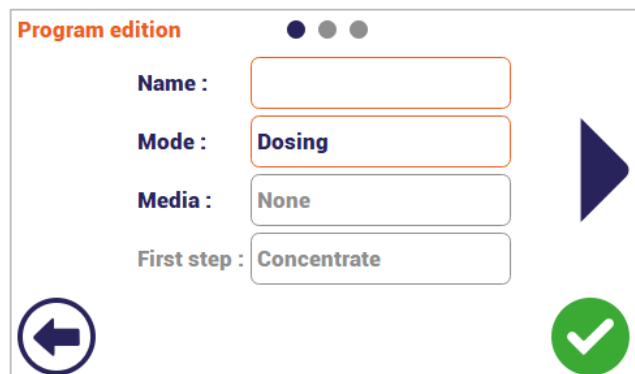
1. From the Home menu, press .



2. Press .



3. Press the **Name** field and enter the new program name.



Program edition

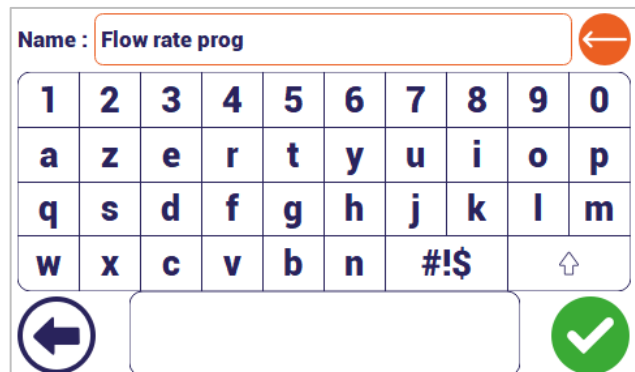
Name :

Mode :

Media :

First step :

4. Press  to confirm.



Name :

1	2	3	4	5	6	7	8	9	0
a	z	e	r	t	y	u	i	o	p
q	s	d	f	g	h	j	k	l	m
w	x	c	v	b	n	#!\$			

5. Press the **Mode** field to select **Flow rate**.

Program edition

Name :

Mode :

Media :

First step :

Navigation icons: back, forward, confirm

6. Press the **Media** field to select the media to be used.

i When a concentrate type media is selected, the **First step** field is enabled, to let you select which media you wish to dispense first: **Concentrate** or **Water for concentrate**.

Program edition


Name :

Mode :

Media :

First step :

Navigation icons: back, forward, confirm

7. Press  to access the second edition page.

8. Press the **Dose** field.

Program edition


Dose :


Number of doses:

or total of:

Flow rate :

Navigation icons: back, forward, confirm


9. Press  to empty the value.

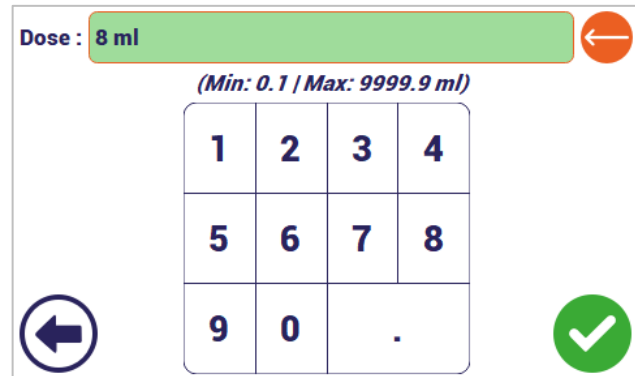
Dose : 

(Min: 0.1 / Max: 9999.9 ml)

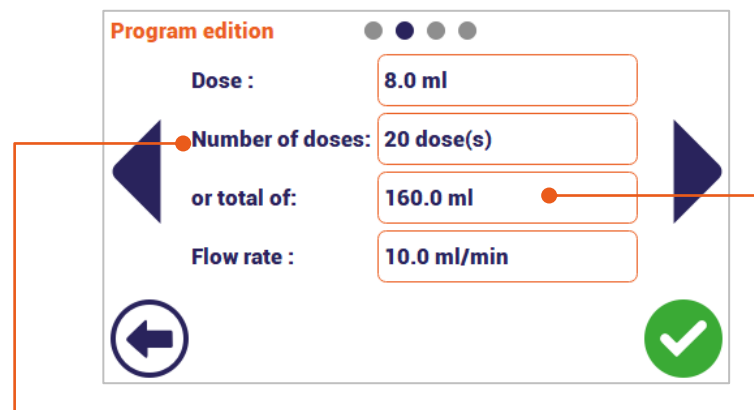
1	2	3	4
5	6	7	8
9	0	.	

Navigation icons: back, confirm

10. Enter the dose volume to be dispensed and press .







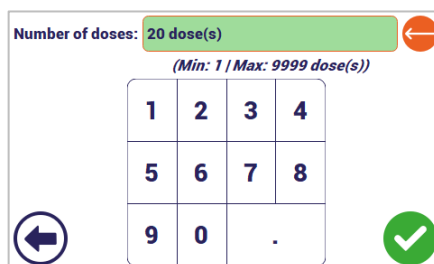
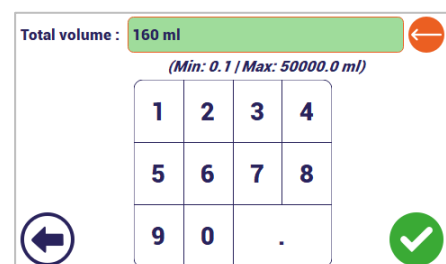
You can either enter a **Number of doses** required or a **total volume** to be dispensed.



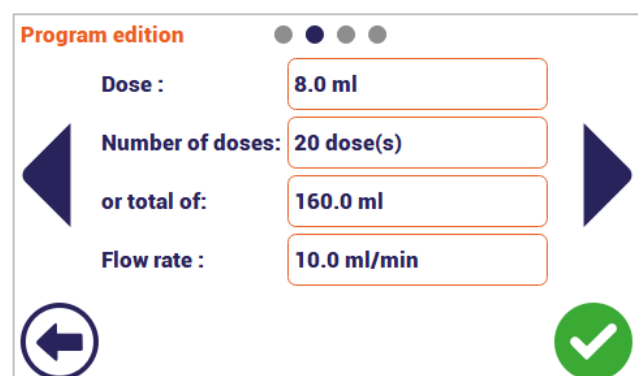
Entering a number of doses


Entering a total volume

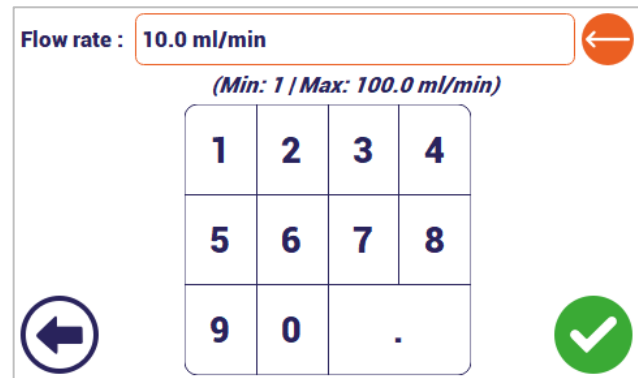
- | | |
|--|---|
| d. Press the Number of Doses field. | d. Press the Total volume field. |
| e. Press  to empty the value. | e. Press  to empty the value. |
| f. Dial the number of doses required and press  . | f. Enter the total volume to be dispensed and press  . |





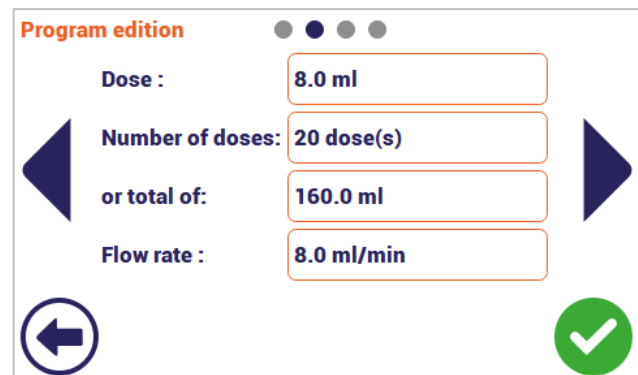
11. Press the **Flow rate** field to modify it, if required.



12. Press  to empty the value.




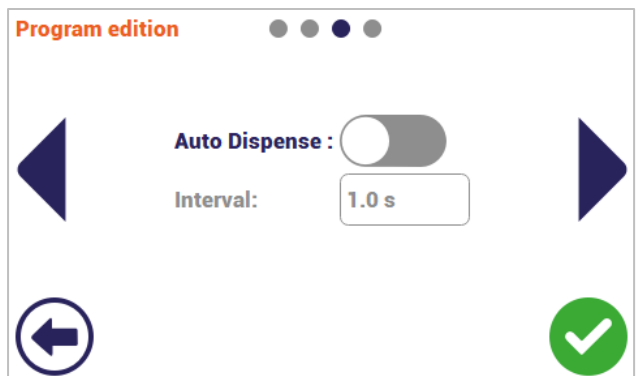
13. Enter the flow rate required and press .




14. Press  to access the third edition page.


15. Enable or disable the **Auto dispense** option.

 Auto Dispense is a hand-free dispensing mode, using a defined time interval. If enabled, set the interval between each dispensing.



16. Enable or disable the **Auto dispense** option.

 Auto Dispense is a hand-free dispensing mode, using a defined time interval. If enabled, set the interval between each dispensing.

17. Press  to access the 4th edition page.

18. Enable or disable **Adjustment**.



If enabled, an adjustment will be required before starting the program.

19. Enable or disable **Verification**.



If enabled, a calibration will be required after the defined number of doses.

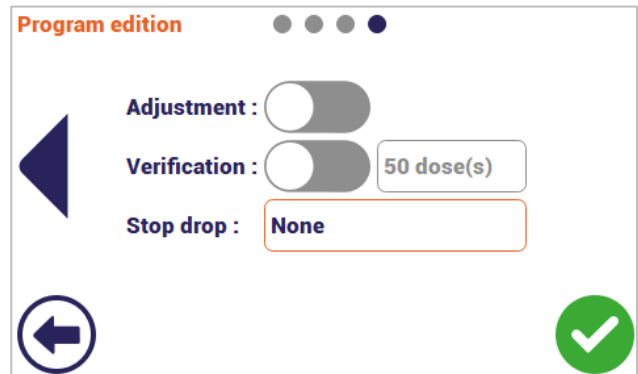
20. Press the **Stop drop** field to select either **None**, **Short** or **Extended**



Stop Drop feature is a light pump roll back that avoids the final drop between 2 doses that may occur with some types of media.

21. Press  to confirm.

The newly created program is added.

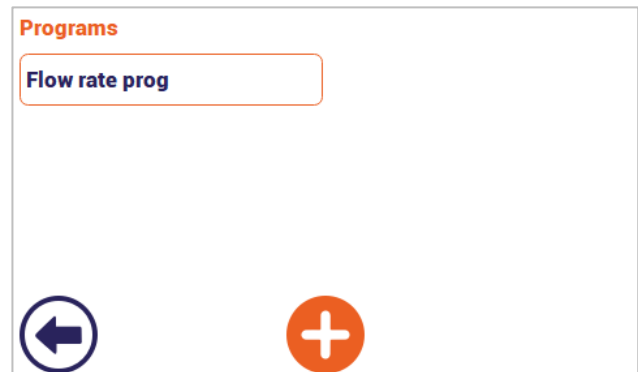


Program edition

Adjustment : ☐

Verification : ☐ 50 dose(s)

Stop drop : None



Programs

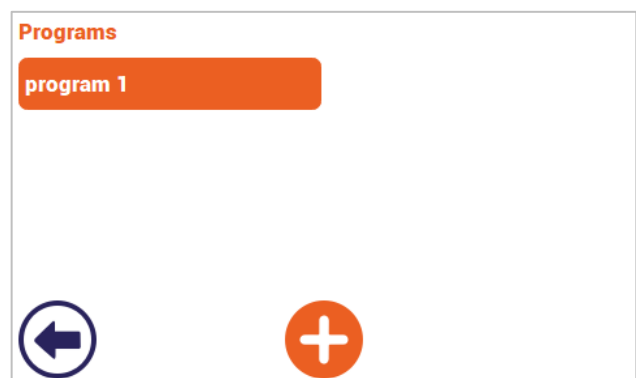
Flow rate prog

Modifying a program

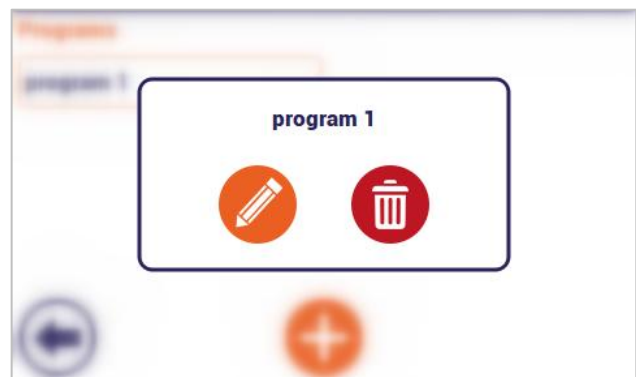
1. From the Home menu, press .




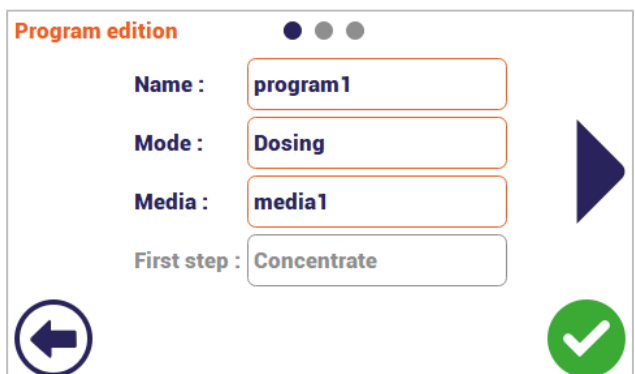
2. Press and hold the program to be modified.



3. Press .



4. Press the field(s) to be modified.
5. Modify as required and press  to confirm.

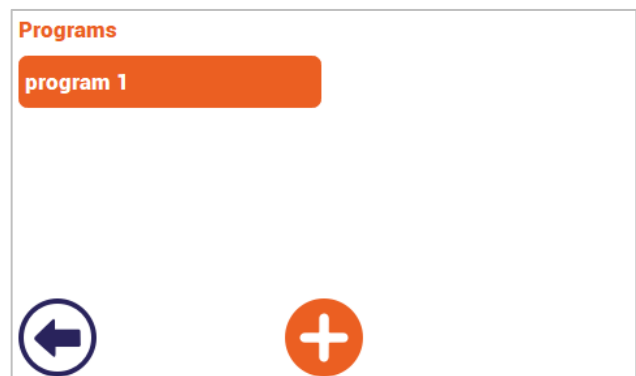


Deleting a program

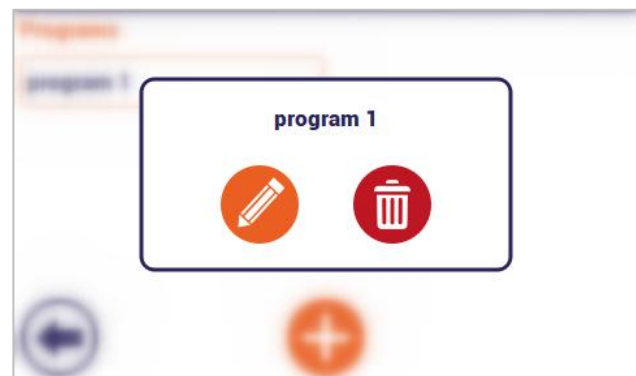
1. From the Home menu, press .



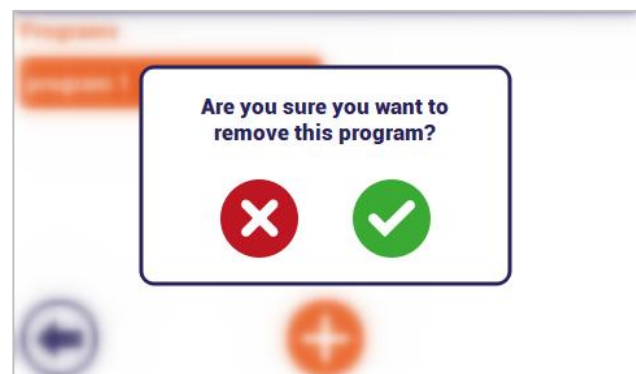
2. Press and hold the program to be deleted.



3. Press .



4. Press  to confirm.



Managing users

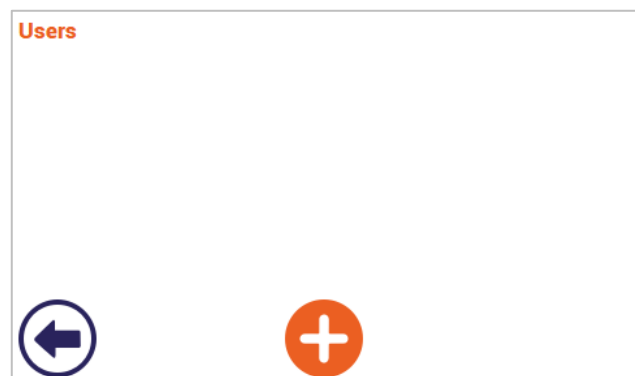
You can decide to create usernames so that users can log in before using the device. This means that the username used to perform an operation appears on the report.

Creating a user name

1. From the Home menu, press .




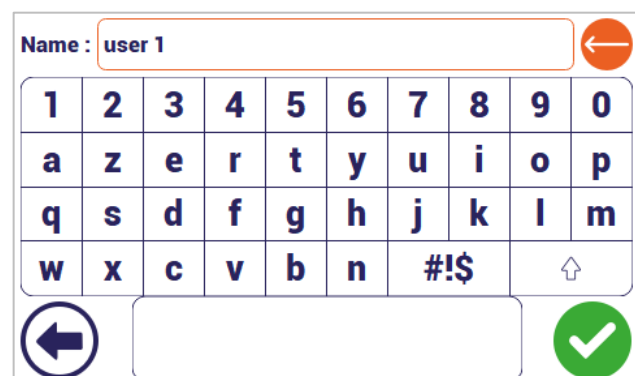
2. Press .



3. Press the **Name** field to enter the new user name.




4. Enter the name and press  to confirm.



- Press  to confirm the user creation.



User edition

Name :



- The newly created user name is added.




Users



 

Modifying a user name

- From the Home menu, press .



 

- Press and hold the user name to be modified.

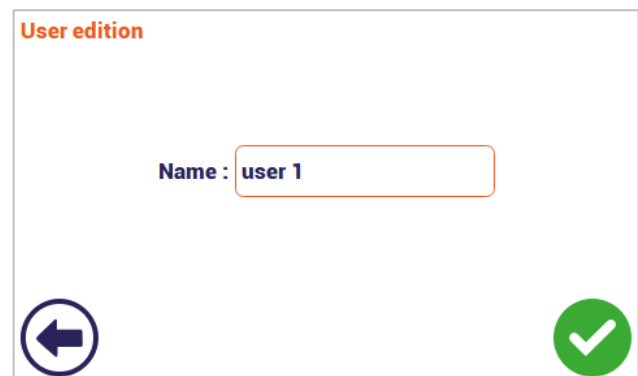
Users

3. Press .



4. Press the **Name** field to modify the user name.



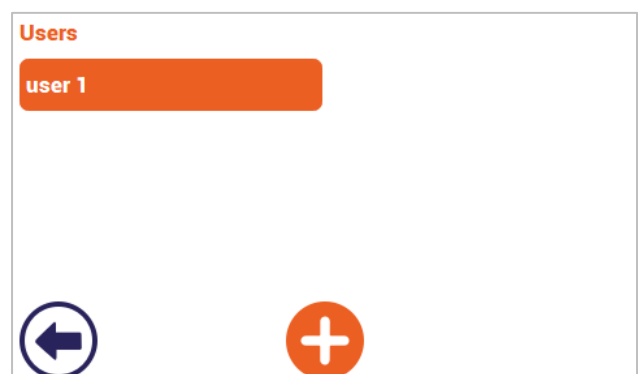
5. Press  to confirm the modification.

Deleting a user name

1. From the Home menu, press .



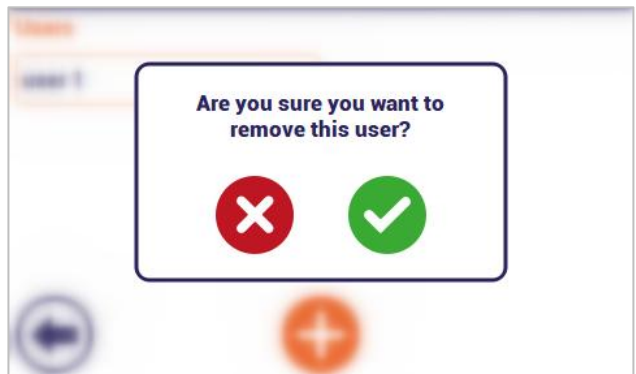
2. Press and hold the user name to be deleted.



3. Press .



4. Press  to confirm.




When trying to remove the user who is connected, a message reminds you to log out.

The user you are trying to remove is the connected user, please log him out.



Logging in

1. From the Home menu,
press .

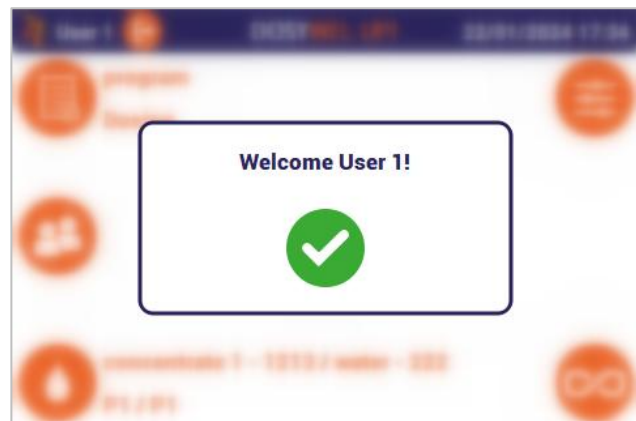


2. Press the username that you want to use to log in.



A welcome message appears.

3. Press .



The user name appears on the top left corner.


 To log out, press .

Running a program

You have 2 possibilities to run a program:

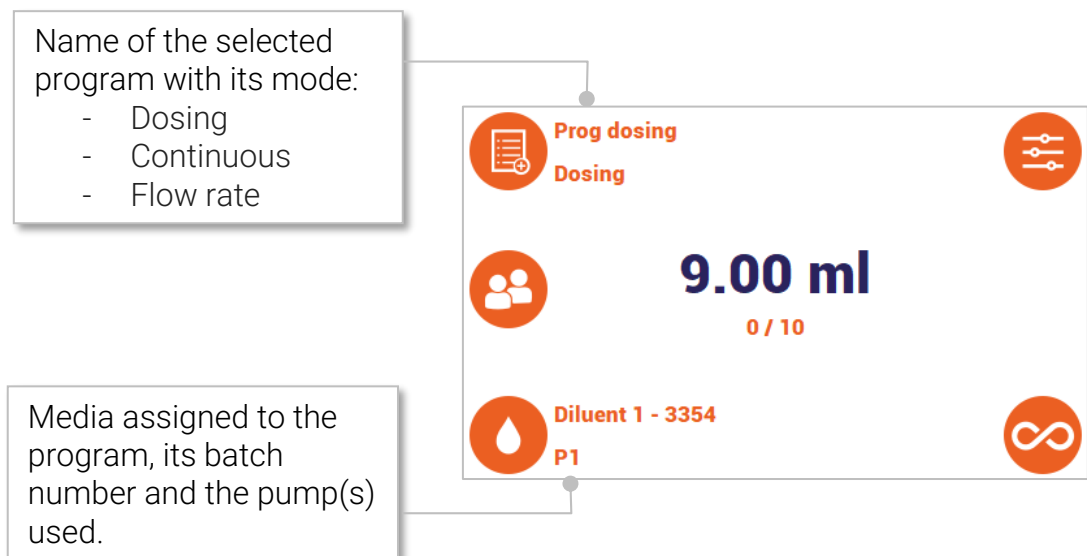
- Using a program that you preset (dosing, continuous, flow rate program)
- Running a “quick program” without predefined settings


Running a dosing program


1. From the Home menu, press .
2. Press the program that you need to use.




Details about the program to be run are displayed on screen:



 You may press  to modify and select another media than the one assigned to the program.

3. Press the  key to start the program.


 If “Calibration” was enabled while creating the program, the following steps need to be followed prior dispensing:

a. Press the **Expected volume** field to modify the expected calibration volume value.

b. Insert the dispensing nozzle into a measured container.

c. Press the  key to dispense a calibration dose.

d. Press the **Measured volume** field.

e. Enter the volume that you measured in the container.
And press .



Calibration

Pump Calibration :

Tube diameter :

Expected volume :

Measured volume :



Calibration


Pump Calibration :

Tube diameter :

Expected volume :



Measured volume :


Measured volume : 

(Min: 0.0 | Max: 9999.99 ml)

1	2	3	4
5	6	7	8
9	0	.	

 You can press the  key to dispense another calibration dose.

f. Once measured volume is correct, press .



Calibration

Pump Calibration :

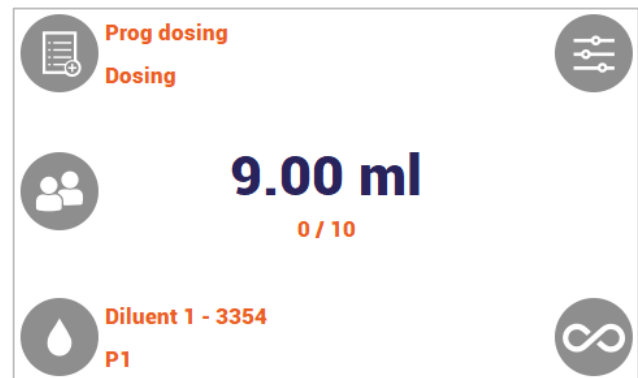
Tube diameter :

Expected volume :


Measured volume :

4. Press the  key to start dispensing.



The first dose is dispensed.

If you did not set an automatic dispensing, press the  key to dispense each dose.





If Auto Dispense option was enabled when setting the program, doses are dispensed automatically.





Verification enabled:

If the **Verification** option is enabled, a control calibration will be required according to the previously set value.


- Press the  key to dispense a calibration dose into a measured container and enter the measured value.
- Press  to resume the process.

Calibration

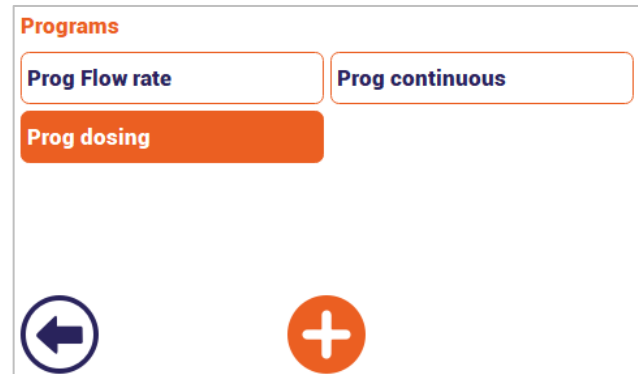
Pump Calibration :	<input type="text" value="P1"/>
Tube diameter :	<input type="text" value="6.4"/>
Expected volume :	<input type="text" value="9.0 ml"/>
Measured volume :	<input type="text"/>

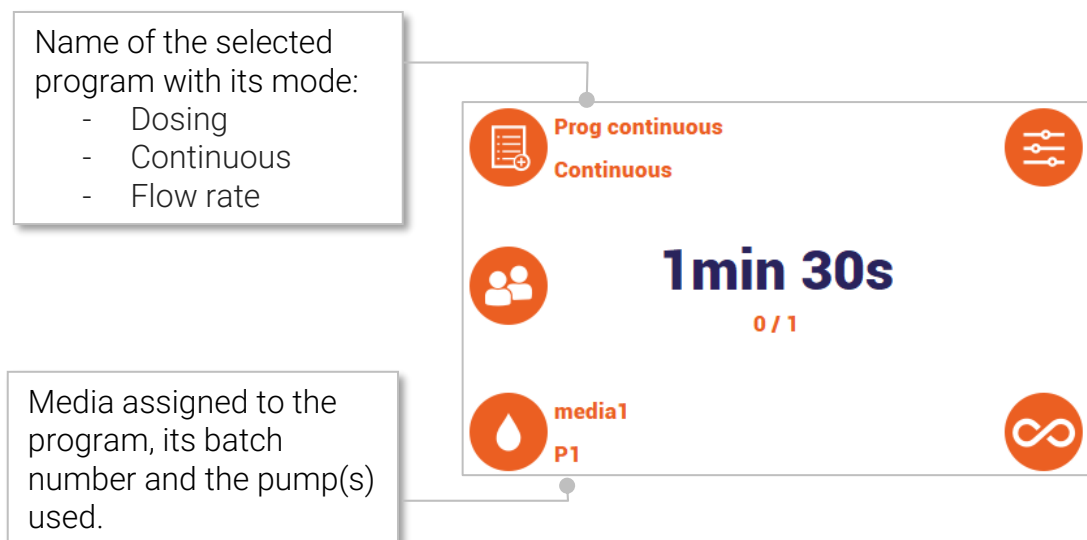
Running a continuous program



1. From the Home menu, press .


2. Press the program that you need to use.



Details about the program to be run are displayed on screen:




-  You may press  to modify and select another media than the one assigned to the program.

3. Press the  key to start the program.

Dispensing starts for the set duration.



Running a flow rate program

1. From the Home menu, press .

2. Press the program that you need to use.



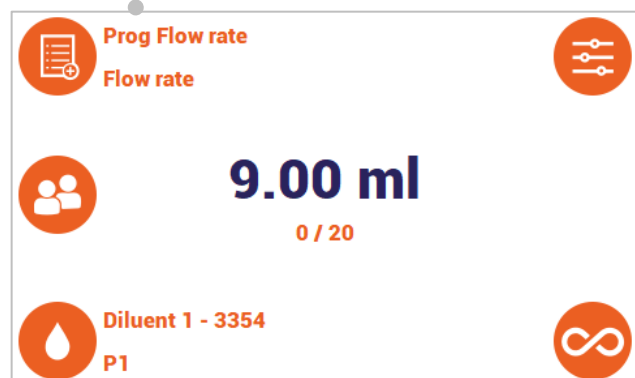
The screenshot shows a menu titled "Programs" with three buttons: "Prog Flow rate", "Prog continuous", and "Prog dosing". The "Prog dosing" button is highlighted in orange. At the bottom of the screen, there are two large circular icons: a blue arrow pointing left and an orange plus sign.

Details about the program to be run are displayed on screen:


Name of the selected program with its mode:

- Dosing
- Continuous
- Flow rate


Media assigned to the program, its batch number and the pump(s) used.




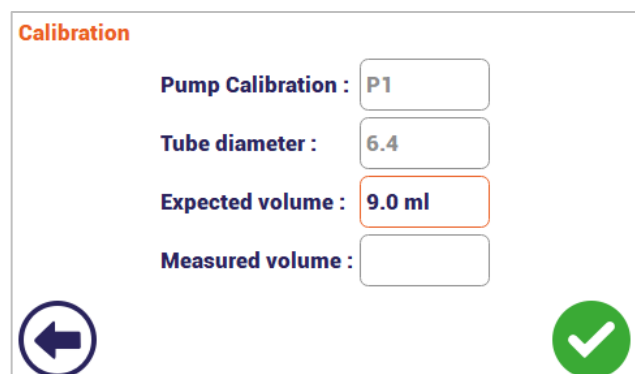
The screenshot shows the program details screen. At the top, it says "Prog Flow rate" and "Flow rate". In the center, it displays "9.00 ml" and "0 / 20". At the bottom, it says "Diluent 1 - 3354" and "P1". There are four circular icons: a list icon, a settings icon, a media icon, and an infinity icon.

 You may press  to modify and select another media than the one assigned to the program.

3. Press the  key to start the program.

 If "Calibration" was enabled while creating the program, the following steps need to be followed prior dispensing:

- a. Press the **Expected volume** field to modify the expected calibration volume value.
- b. Press to  to confirm.



The screenshot shows the "Calibration" screen. It has four input fields: "Pump Calibration" (P1), "Tube diameter" (6.4), "Expected volume" (9.0 ml), and "Measured volume". At the bottom, there are two large circular icons: a blue arrow pointing left and a green checkmark.

c. Insert the dispensing nozzle into a measured container.

d. Press the  key to dispense a calibration dose.

e. Press the **Measured volume** field.



Calibration


Pump Calibration :


Tube diameter :

Expected volume :

Measured volume :


 

f. Enter the volume that you measured in the container.
And press .

Measured volume : 

(Min: 0.0 / Max: 9999.99 ml)

1	2	3	4
5	6	7	8
9	0	.	

g. Press .



Calibration


Pump Calibration :

Tube diameter :

Expected volume :


Measured volume :


 


4. Press the  key to start dispensing.




The first dose is dispensed.

5. Press the  key to dispense each dose.

 **Prog Flow rate**
Flow rate

 **8.24 ml**
1 / 20

 **Diluent 1 - 3354**
P1




If Auto Dispense option was enabled when setting the program, doses are dispensed automatically.



Verification enabled:

If the **Verification** option is enabled, a control calibration will be required according to the previously set value.

- Dispense a dose into a measured container and enter the measured value.
- Press  to resume the process.



Calibration

Pump Calibration :

Tube diameter :

Expected volume :

Measured volume :

Running a quick program

It is possible to run a program without using a preset program. This allows to define temporary parameters for a one-shot program.

- From the Home menu, press and hold .



- Press the **Mode** field to select the type of dispensing you need: **Dosing**, **Continuous** or **Flow rate**.

Quick program

Mode :

Media :

First step :

- Press the **Media** field to select the media to be dispensed.





If you select a concentrate type media, you need to select which media you wish to start with: **Concentrate** or **Water**.


Quick program

Mode :

Media :

First step :





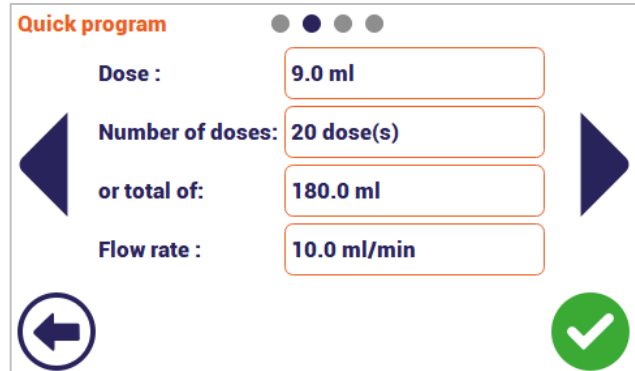
- Press  to access the second edition page.

Dosing and Flow rate mode


When selecting **Dosing or Flow rate**, you need to define:

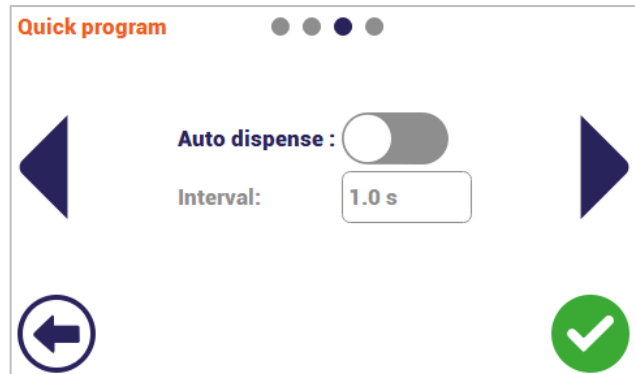
- the dose Volume
- either the number of doses or the total volume to be dispensed.
- the pump speed / flow rate

a. Press  to access the third edition page.




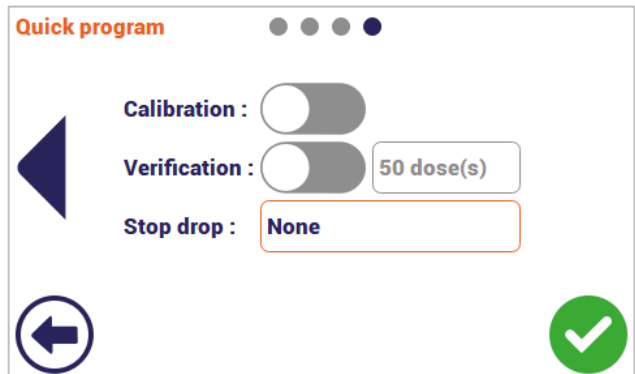
b. Enable or disable the **Auto dispense** option.

 Auto Dispense is a hand-free dispensing mode, using a defined time interval.
If enabled, set the interval between each dispensing.




c. Enable a **Calibration** and/or a **Verification**, if required.


 If Verification is enabled, a calibration will be required after the defined number of doses.



5. Press the **Stop drop** field to select either **None**, **Short** or **Extended**


 **Stop Drop** feature is a light pump roll back that avoids the final drop between 2 doses that may occur with some types of media.

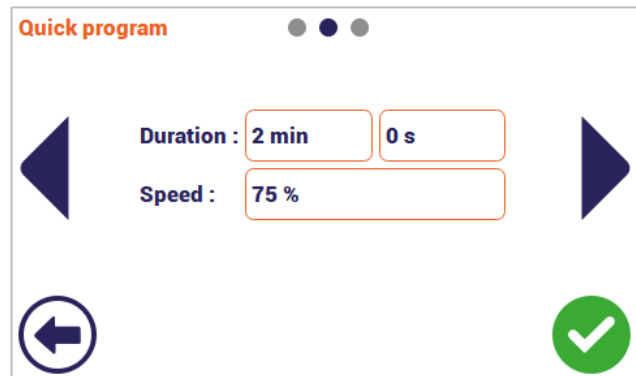
a. Press .

b. Press the  key to start dispensing.

Continuous mode

When selecting **Continuous**, you need to define:

- The program duration
- The pump speed
- Press  to access the third edition page.

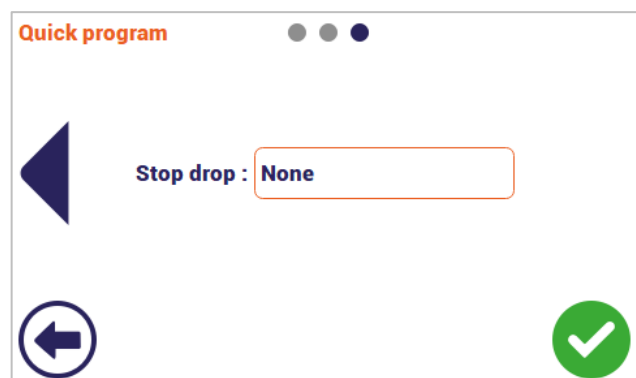


- Press the **Stop drop** field to select either **None**, **Short** or **Extended**



Stop Drop feature is a light pump roll back that avoids the final drop between 2 doses that may occur with some types of media.

- Press .





- Press the  key to start dispensing.

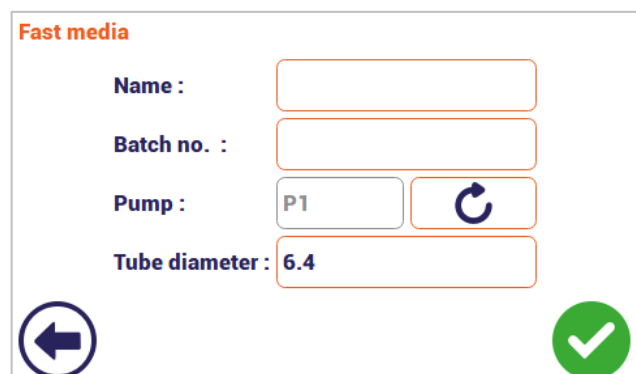
Creating a temporary media

When starting a cycle, you can use a temporary media instead of the one initially assigned to the selected program.




Please note that these changes are cancelled once the program is closed, or the device is switched off.


- Once a program has been selected, press and hold .
- Enter the media **Name**.
- Enter the **Batch no.**
- If required, press  to modify the pump rotation.
- Modify the Tube diameter if required.



Adjusting the pump

1. From the Home menu, press .



2. If required, press and hold  to prime the pump until the liquid is distributed all over the tubing set.

3. Press the **Expected volume** field.




Adjustment


Pump adjustment:


Tube diameter :

Expected volume :

Measured volume :



  

4. Enter the volume that you want to use for the adjustment and press .


Expected volume : 

(Min : 0.1 | Max : 9999.9 ml)

1	2	3	4
5	6	7	8
9	0	.	

5. Orient the dispensing nozzle into a graduated container.

6. Press  to dispense an adjustment dose.

7. Press the **Measured volume** field.




Adjustment


Pump adjustment:


Tube diameter :

Expected volume :

Measured volume :



  

8. Enter the measured volume value and press .



Measured volume : 


(Min : 0.01 / Max : 9999.99 ml)

1	2	3	4
5	6	7	8
9	0	.	

If the measured volume is not as expected:

- Empty the graduated container.
- Press  to dispense another dose.
- Press the measured volume field to enter the volume of the dispensed dose and press .

9. Once the measured volume fits with the expected volume, press  to confirm the pump adjustment.




Adjustment

Pump adjustment:

Tube diameter :

Expected volume :

Measured volume :

Connecting peripherals

4 USB ports allow the connection of different peripherals to your DOSYWEL UP! ;



You can connect peripherals such as:

- A ticket printer
- A barcode reader
- A foot switch
- A hand dispenser



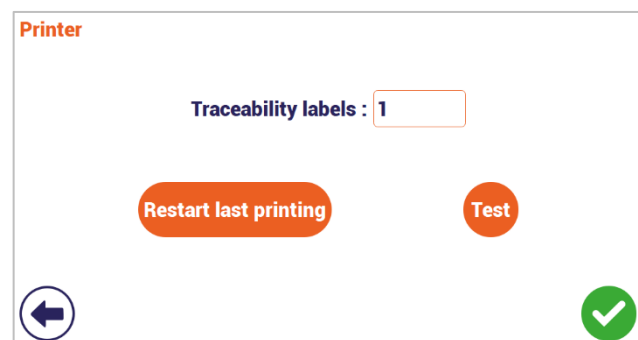
As soon as they are connected, peripherals are automatically identified.

Connecting a ticket printer



1. Connect the ticket printer to a USB port at the back of the pump.
2. From the Home menu, press  and press .
3. Press the printer field to access the setting screen.

4. From this screen you can:

- Set the number of traceability tickets to be printed at the end of a program.
- Print again the last printed ticket by pressing “Restart last printing”.
- Test the printer operational order by pressing “Test”.



Connecting a barcode reader

1. Connect the barcode reader to a USB port at the back of the pump.
2. From the Home menu, press  and press .
3. Select the barcode reader field to access the setting screen.

4. Use the barcode reader to scan a barcode.

The “Type of code” and “Value fields” are filled in by the barcode data.

Barcode reader


Scan a barcode



Type of code :

Value :



Connecting a foot switch

You can connect a foot switch to the pump, so that you can use it to start dispensing instead of pressing the  key.

1. Connect the foot switch cable to a USB port at the back of the pump.
2. From the Home menu, press  and press .
3. Select the foot switch field to access the testing screen.
4. Press the foot switch.



The message “Not pressed” turns to “Pressed on”.

Connecting a hand dispenser

1. Connect the hand dispenser cable to a USB port at the back of the pump.

The ON/OFF button is green.



2. From the Home menu, press  and press .
3. Select the hand dispenser field to access the testing screen.
4. Press the ON/OFF button.

On screen, the message “Not pressed” turns to “Pressed on”.

5. Press the **Led** toggle button  to enable the hand dispenser led.

The blue leds light up.




6. Insert the tubing set, making sure the tubing passes behind the guides.

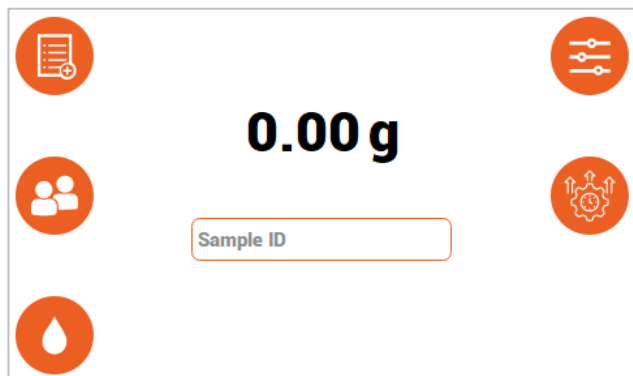


Maintaining the device

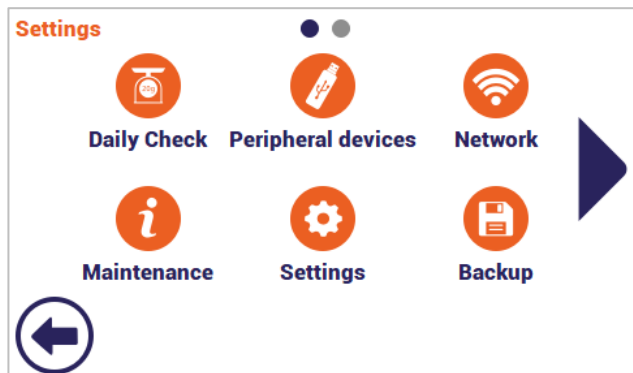
Backup: Exporting / Importing data

It is possible to export data about users, programs and media onto a USB key. This set of data can then be imported to another DOSYWEL UP!.

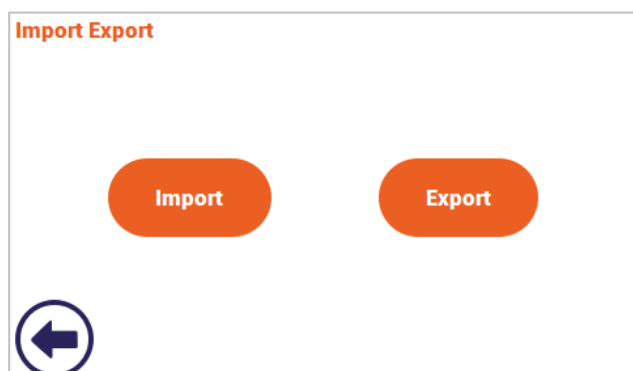
1. Plug a USB key at the back of the device.
2. From the Home menu, press .



3. Then press .



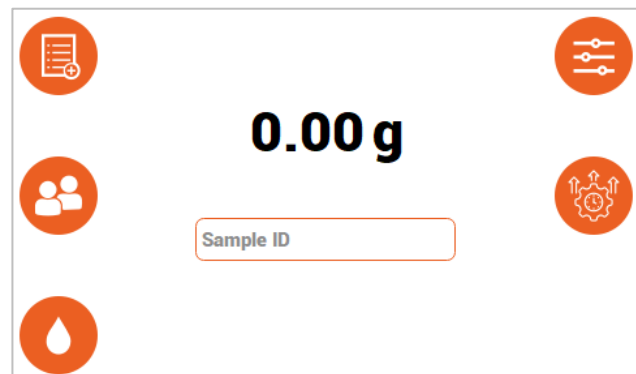
- To export data from the DOSYWEL UP! to the USB key, press the **Export** button.
- To import data previously exported on the USB key to the DOSYWEL UP!, press the **Import** button.



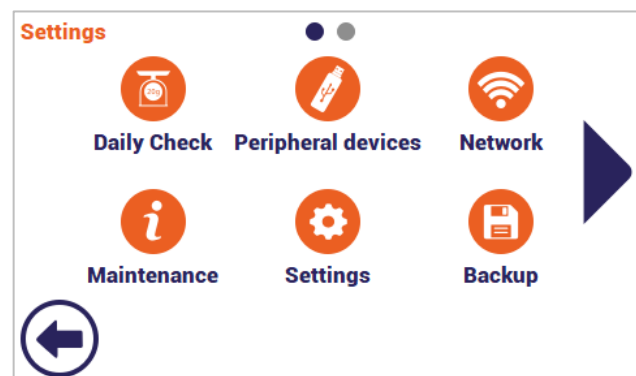
Updating the device software


1. At the back of the device , plug the USB key on which the update firmware is stored.

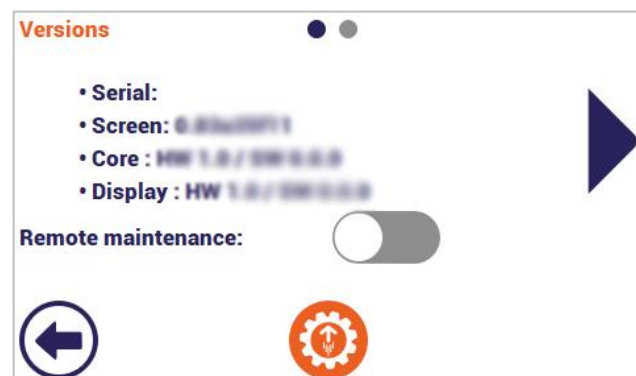
2. From the Home menu, press



3. Press  to access the **Versions** menu.



4. Press  to start updating.

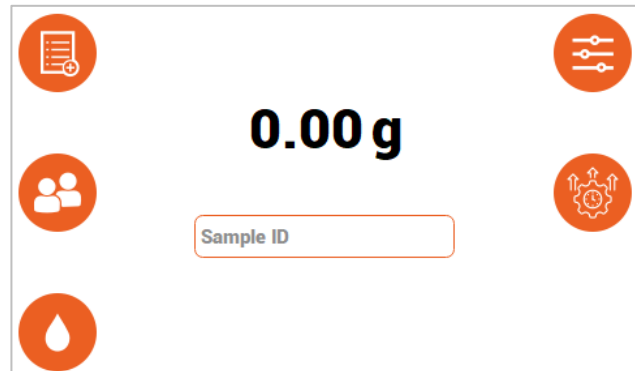


The DOSYWEL UP! searches the update file on the USB key and a popup screen asks for confirmation before starting update.

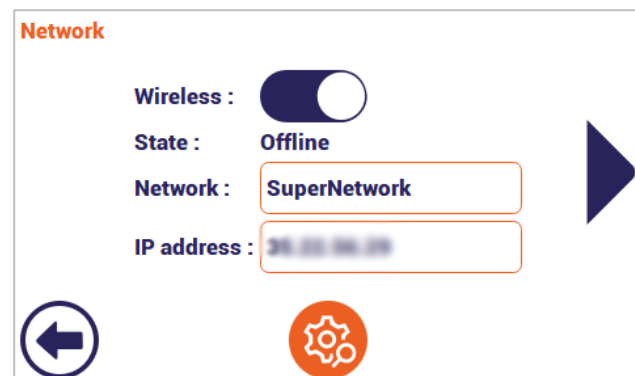
5. Press  to confirm.

Testing network connection

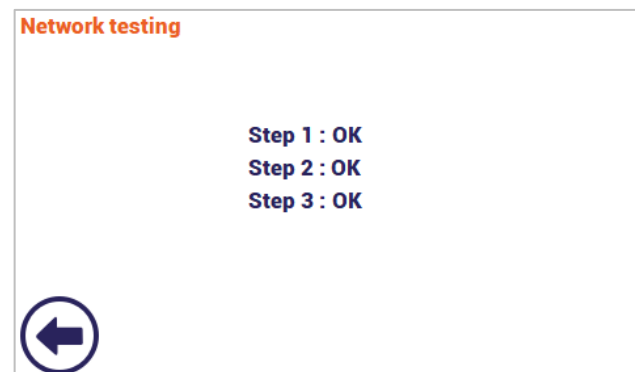
1. From the Home menu, press



2. Press  to access the **Network** menu.



3. Press  to start testing.



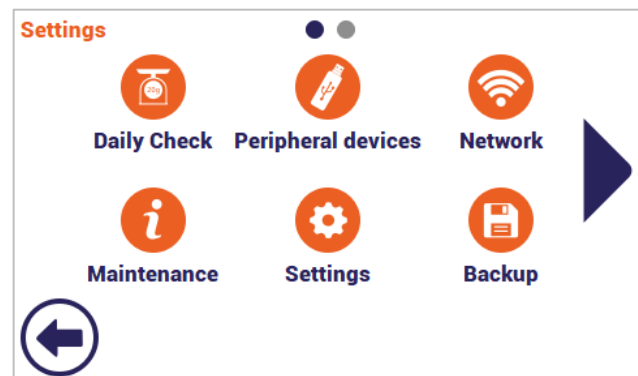
Whatever the network that you enabled, this procedure allows testing both WIFI and Ethernet networks


Starting a remote maintenance

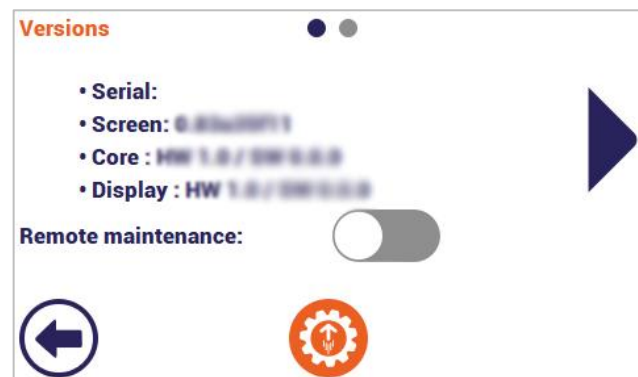
1. From the Home menu, press



2. Press  to access the **Versions** menu.



3. Press the toggle button  to enable the **Remote Maintenance** function.



Annual upkeeping

The user must not access the inside of the machine. Only Alliance Bio Expertise technicians or trained by Alliance Bio Expertise technicians can realise the annual upkeep. Otherwise, Alliance Bio Expertise cannot be held responsible for events.

Cleaning

For your own safety, the equipment must be switched off and disconnected from the mains supply before any intervention.

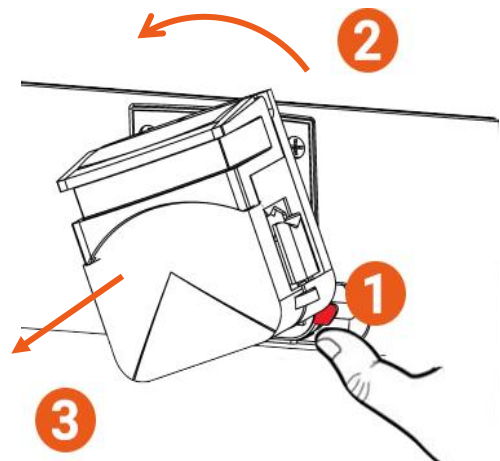
The device should be cleaned using hydroalcoholic solution or a 70-degree disinfectant on a paper towel.

Tubing sets must be rinsed with hot water and autoclaved.

Pump head removing

If necessary, you can remove the pump head to perform deep cleaning.

1. Press the white latch on the right side of the pump head.
2. Turn counter-clockwise.
3. Pull the pump head out.



Traceability

Please note that the device stores only the last 48 hours cycle data.
It is possible to export data towards a USB key.

Exporting to a USB key

Please note that the device stores only the last 48 hours cycle data.

To export analysis and metrology data as a .csv file, you simply need to connect a USB key at the back of the device.

As soon as a USB key is connected, export is done along as cycles are performed.

If you connect a key while some cycles were performed previously, a message pops up to ask confirmation for exporting data.

Upkeeping

For your own safety, the equipment must be switched off and disconnected from the mains before any technical intervention.

It is recommended to perform a regular, functional and safety check at least once a year.

Make sure that the grounding of the unit is always properly ensured by its power supply cord and wall outlet to which it is connected.

The user must not access the inside of the machine.

Contact Alliance Bio Expertise or their official distributors for any maintenance.

Only Alliance Bio Expertise technicians or technicians trained by Alliance Bio Expertise can carry out the annual upkeep. Otherwise, Alliance Bio Expertise cannot be held responsible for events.

Technical specifications

Dimensions (H x L x P)	Unpacked: 253 x 160 x 250 mm Packed: 320 x 350 x 290 mm
Weight	Unpacked: 3.1Kg Packed: 5 Kg
Ambient Temperature recommended	From 5°C to 45°C (41°F à 113°F)
Ambient humidity recommended	Maximum 80%
Atmospheric pressure required	From 700 hPa to 100 hPa
Max. Altitude	Up to 2000 meters
Mains supply voltage	AC 85 to 264 Volts / 47 to 63 Hz
Machine supply voltage	24V DC, 5A
Power rating	120W
Pollution degree	2
Electrical environment	According to international standards EN61010- 1:2010 + A1:2019, safety requirements for electrical equipment measuring, control, and standards of use in laboratory.
Installation category	Category II according to IEC 664 standard
Electromagnetic compatibility and performance	According to EN61010- 1:2010 + A1:2019, international standards about the safety requirements for electrical equipment for measurement, control, and laboratory use standards. Requirements about the CEM (emission and immunity).

Pump speed settings recommendations

The table below indicates how the pump speed influences the dispensing precision and duration.

The Dosywel Up! performances are validated with Alliance Bio Expertise tubing. If use with other tubing, correct operation of the pump cannot be guaranteed.

Dispensed volume (ml)	Tubing inner diameter			
	1.6 mm	3.2 mm	6.4 mm	8 mm
1	Pump speed: 75% Precision: 5%			
9		Pump speed: 100% Precision: 2% Duration: 1s		
100		Pump speed: 100% Precision: 2% Duration: 13.3s	Pump speed: 50% Precision: 5% Duration: 5s	
200		Pump speed: 50% Precision: 2% Duration: 30s	Pump speed: 50% Precision: 2% Duration: 10s	
500		Pump speed: 50% Precision: 2% Duration: 1min 12s	Pump speed: 60% Precision: 2% Duration: 28s	Pump speed: 50% Precision: 2% Duration: 4min 6s
1000			Pump speed: 60% Precision: 2% Duration: 52s	Pump speed: 50% Precision: 2% Duration: 4min 6s
5000			Pump speed: 50% Precision: 2% Duration: 4min 6s	Pump speed: 50% Precision: 2% Duration: 2min 32s
10000				Pump speed: 50% Precision: 2% Duration: 5min 16s



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