

START-UP GUIDE

DESSALATOR® FREEDOM D60 & D100 NAVIGATOR

AUTOMATIC

60 or 100 liters/hour



Dessalator®

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Start-up guide DC FREEDOM Navigator D60/100 v4.9 EN (03/23)

 **DESSALATOR®**
watermakers - dessalinisateurs

Procedure for commissioning the Dessalator®

Important step prior to starting-up:



Before starting-up, check that the valves are open.

Mandatory steps:

- When using the device for the first time, or after changing the filter, or after the boat has been grounded or stopped for a long time, you should flush the system using fresh water by operating the three-way valve on the prefilter (*see Appendix at the end*). This operation must be carried out for 2 minutes with the watermaker stopped and the pressure regulator open (1/4 turn counterclockwise, before the left stop).
- Once the system is fully filled, put the valve back in seawater position (*see Appendix at the end*).
- It is important to take into account the ampere capacity of the battery as well as the operating time.

When using the system in 12 or 24V for more than 5 minutes, it is mandatory to turn on either the boat engine, or the battery charger through the shore power supply, or a generator.

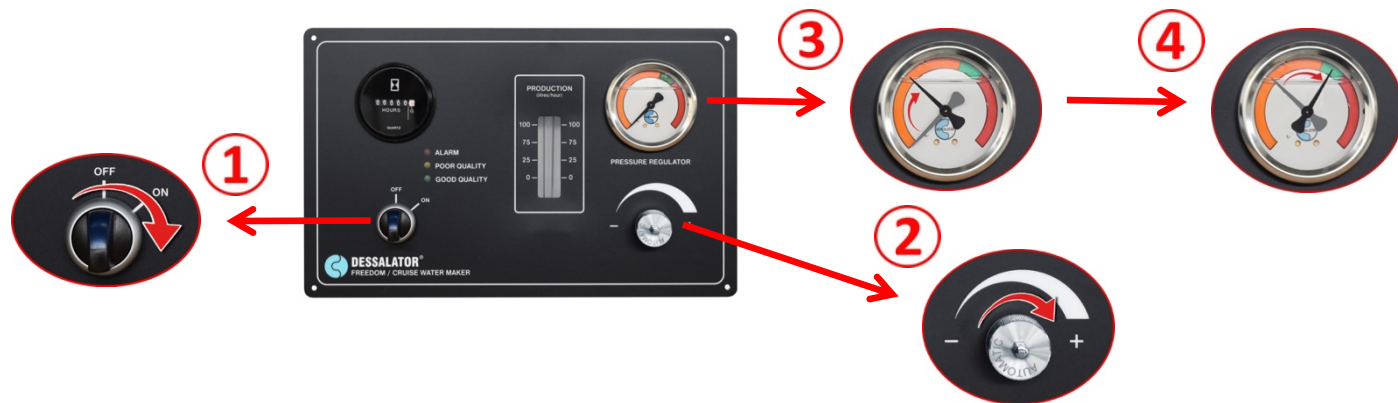
First start-up of the watermaker :

The NAVIGATOR control panel is equipped with a motorized knob regulator to adjust the pressure. However, it is still possible to carry out the pressurization by hand, this will momentarily deactivate the automatic mode. The device will then return to Automatic mode for the next use.

Starting the watermaker :

Simply set the switch ① to ON the pressure regulator dial ② will automatically go in the green zone of the pressure gauge as shown in ③ then ④. This procedure takes about 3 minutes.

Once this procedure is done, your watermaker will start producing fresh water, after checking that it is of good quality.



➡Note :

The fresh water yield depends on the temperature and salinity of the sea water as well as on the good quality of the voltage supplying the engine.

Stopping the watermaker: without rinsing of the membranes:

It is not necessary to rinse your membranes if you use your watermaker regularly.

Set the switch ① to OFF, the watermaker will stop.



Beyond 10 days without use, it is best to rinse the membranes before the watermaker is started-up again (see manual rinse procedure in *Appendix* at the end).

Stopping the watermaker: with rinsing of the membranes:

A rinsing must be carried out if the watermaker is not going to be used for more than 10 days.

After using the watermaker, **do not turn it off**. Start turning the knob of the pressure regulator ② (counterclockwise) to engage the rinsing mechanism ③.

The watermaker will then start the rinsing procedure. The green and yellow LEDs ④ on the control panel will turn on, indicating that the flushing procedure is started. The procedure lasts 30 seconds. Once it is complete, the green and yellow LEDs ④ will turn off and the only remaining light will be the flashing blue LED on the switch ①. If you do not have a Mini Remote Control, you can turn off the system by positioning the switch ① to OFF.



If the watermaker is stopped for more than 1 month, it is essential to rinse it for 2 minutes (see *Appendix at the end*). If you are not going to use the watermaker at all, it is essential to either sterilize the membranes for storage (for a maximum duration of 6 months) or to rinse it out at least once a month.

Using the Micro-Command (optional)


Once you start-up the system for the first time using the control panel, you can use the Micro-Remote Control to perform the following: monitor the state of the system, stop, perform a rinse or restart the system.



STARTING YOUR WATERMAKER :

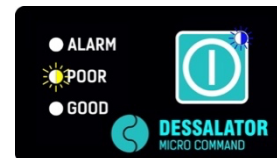


2 sec.

To start the watermaker from STANDBY, press and hold the button  for about 2 seconds.

The BLUE LED of the button will start to blink and the buzzer will acknowledge the operation with 2 'beeps'.

Upon release of the button, the watermaker will start.



The RED, YELLOW and GREEN LEDs will show the same indication as on the control panel of the watermaker.

The blinking speed of the YELLOW LED provides feedback of the water pressure in the system : faster blinking means higher pressure.




Note : It is best practice to slowly build up water pressure inside the system in order to prolong the lifetime of your membranes.

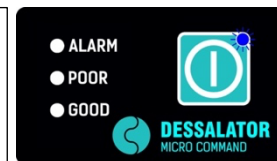
For that reason, should you plan to start your watermaker frequently using the Micro-Command we highly recommend to consider a machine with Automatic Pressure Regulation, like the **DESSALATOR Navigator, Automatic or Pro-Auto** series.

STOPPING YOUR WATERMAKER :



2 sec.

To STOP your watermaker normally :
Press and hold the button  for about 2 seconds.
Upon release of the button, the watermaker will STOP and go to STANDBY.




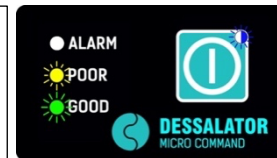
STOPPING YOUR WATERMAKER WITH AN AUTOMATIC RINCE CYCLE :

Note : Whilst the automatic rinse function is present on all DESSALATOR watermakers, this function should only be initiated *remotely* on a watermaker equipped with Automatic Pressure Regulation.



5 sec.

To STOP your watermaker and terminate the process with an automatic rinse cycle :
Press and hold the button  for about 5 seconds until the YELLOW and GREEN LEDs are both lit and a long 'beep' is heard from the buzzer.
Upon release of the button, the watermaker will STOP and initiate an automatic rinse cycle before going to STANDBY.




Note : Les LEDs sont allumées Les LEDs clignotent Les LEDs sont éteintes





Using the Mini Remote Control (optional):

Once you start-up the system for the first time using the control panel, you can use the Mini Remote Control to perform the following: stop, restart, flush and adjust the pressure.



Restarting the watermaker: Use the  button on the Mini Remote Control until you hear 2 beeps. At that moment, you can:


- Change the supply voltage of the watermaker (12/24V or 120/230V) by pressing the  button and confirming with the  button.

- Or directly restart the watermaker by pressing the  button.


A confirmation beep will indicate that the restart procedure has started.

The pressure regulator knob on the watermaker will automatically adjust to the green zone of the manometer. This procedure takes about 3 minutes. Once this is done, your watermaker will start producing fresh water.

Stopping the watermaker WITHOUT rinsing of the membranes:

Directly on the Mini Remote Control by pressing the  button until you hear 2 confirmation beeps that indicate that the watermaker is going into stand-by mode.

Stopping the watermaker WITH rinsing of the membranes:

Directly on the Mini Remote Control by pressing the  button until you hear 2 confirmation beeps that indicate that the watermaker has started the rinsing procedure (an hourglass is displayed on the screen). The procedure lasts 30 seconds. Once complete, the watermaker will go back into stand-by mode.

➡ **Note:** The Mini Remote Control also allows you to schedule a delayed shutdown of the watermaker.

Appendix :

Seawater position:

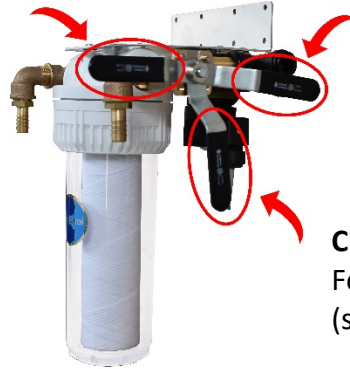
For use in desalinization mode

Fresh water position:

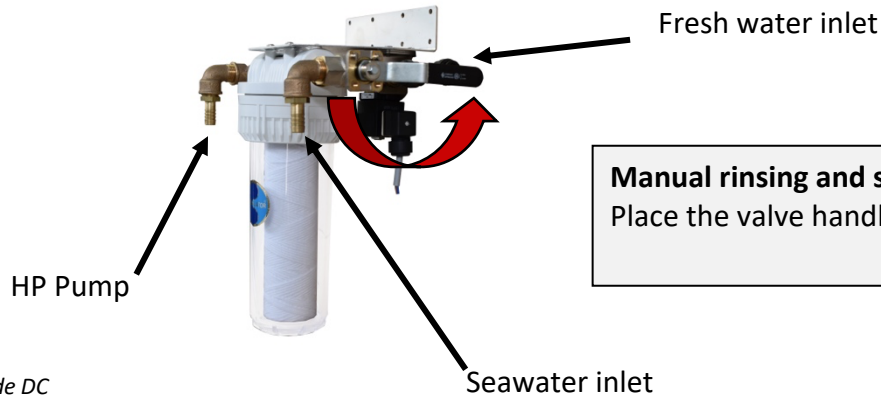
For manual rinsing or sterilization when needed

Closed position:

For changing the filter cartridge
(see **Appendix A4**)



Your DESSALATOR® system comes equipped with an automatic rinsing feature, here is the procedure to follow if you choose to do manual rinsing:



Manual rinsing and sterilization:

Place the valve handle on the fresh water position.