



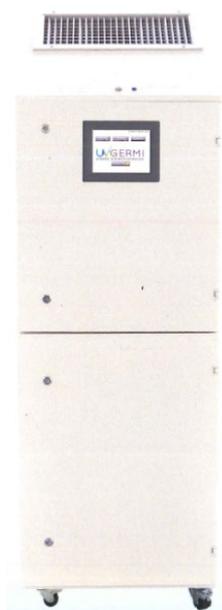
UVGERMI[®]
ULTRAVIOLET HIGH TECHNOLOGY

*The ultraviolet technology's specialist
for air treatment.*

● ○ ● FRENCH MANUFACTURE

AIR CLEANING DEVICE GERMIRCLEAN[®]

— OPERATING INSTRUCTIONS —



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— www.uvgermi.fr —

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1. SAFETY INSTRUCTIONS

In this manual, please pay particular attention to the safety paragraphs.
These are indicated by the **DANGER** symbol or by the words **BEWARE !** or **Warning** :



Risk of serious personal injury.

BEWARE !

Risk that may damage the unit or cause a malfunction.

Warning

Important information about regulations or provisions with which to comply.



A direct or indirect exposure to UV light, even for short periods, may severely damage the eyes and skin. Always switch off the UV lamps during various maintenance operations. If the UV lamps need checking, wear appropriate safety glasses (glass or plastic) and gloves.

The air cleaning device GERMIRCLEAN must only be used for the purpose for which it is intended.

The safety and operation of the dechloramination unit are only guaranteed when installed in line with UVGERMI's recommendations.

The maintenance work must be carried out by competent staff.

2. FIELD OF APPLICATION

GERMIRCLEAN is an air cleaning device dedicated to large indoor environments as laboratory hall, manufacturing hall, public spaces....

Air is treated to remove fine particles, odors and airborne pollutants such as VOCs, bacteria, virus and moulds to make the indoor environment healthy and comfortable.

3. DESIGN

3.1 Chassis and cabinet body

The structure of the device is made of 316L stainless steel sheet. As an option, for aesthetic reasons, it is possible to add a specific covering either with worked sheets (material 304L stainless steel) or with adhesive printed coatings.

Handles are present on the side faces to facilitate gripping of the device. As standard the device is equipped with wheels to facilitate its movement. Stainless steel legs are also available as an option.

3.2 Electrical board

All the elements necessary for the control and ignition of the various functions of the apparatus are attached to an electrical board. This plate is contained in the device, attached to the upper part of the door. It is electrically connected to the various components (lamps, fans, sensors, lights, etc.) and to the power supply.

Powering up the device is via a 3-way key switch (On Air flow rate 1 (Low Speed), Off, On Air flow rate 2 (High Speed)). Between Air flow rate 1 and Air flow rate 2 positions, only the air flow rate is changed, with Air flow rate 1 < Air flow rate 2.

Two electrical board versions are available:

- 1 non communicating version with touch screen on the front of the device;
- 1 communicating version with touch screen on the front of the device, with or without possibility to broadcast audio and video messages (information messages and / or advertising messages).

For all these versions, all operating conditions are indicated via the touch screen.

BEWARE ! In normal operation, all control lights (leds or pictograms) of the UV lamps and the power indicator light must be on.

4. GENERAL DESCRIPTION

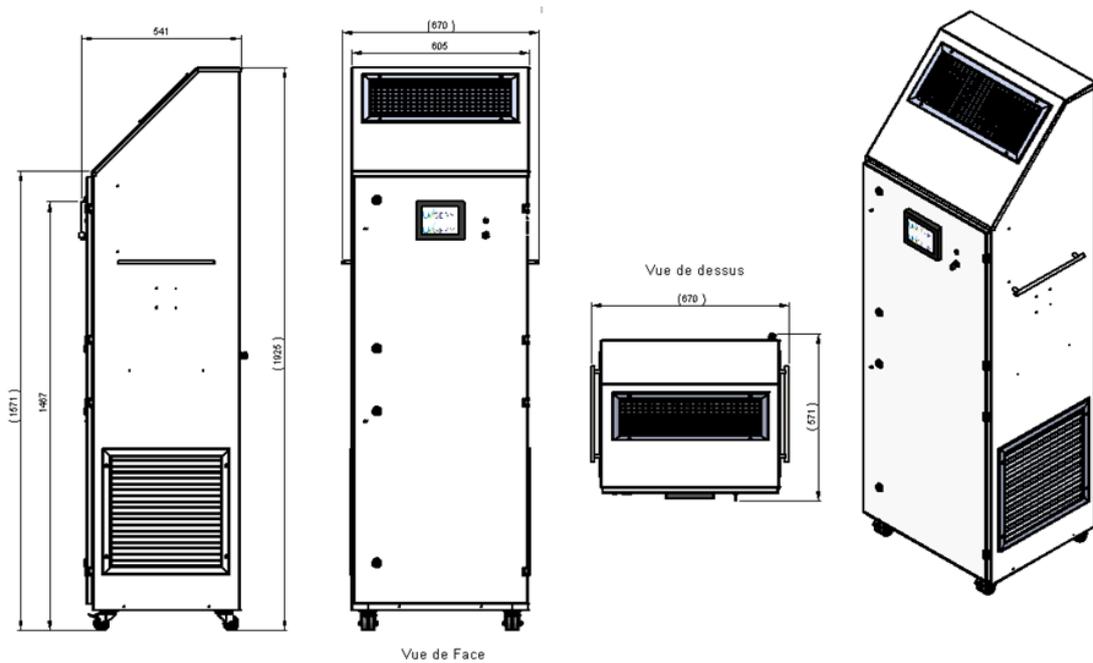
4.1 General presentation



4.2 Dimensions

The overall dimensions of the device are identical for the standard and communicating versions and are as follows:

- Cabinet height with wheels: 1937mm;
- Cabinet height with feet: 1940mm;
- Depth 555 mm;
- Width without handles 605 mm;
- Width with handles 680 mm;
- Weight: 95 kg



4.3 Types of UV lamps

PROCESS REACTOR (Lower part of the cabinet):

- Ref UVGERMI: 14000101;
- Connectors: 4 pins - ceramic;
- Low pressure mercury vapor UV emitter (non-ozone generator);
- Average life of UV lamps: 9000 hours;
- Loss in luminous flux at 254 nm: 20% at 9000 hours;

PROCESS CHAMBER (Upper part of the cabinet) :

- Ref UVGERMI : 15000363 ;
- Connectors: 4 pins - ceramic;
- Low pressure mercury vapor UV emitter (non-ozone generator);
- Average life of UV lamps: 9000 hours;
- Loss in luminous flux at 254 nm: 20% at 9000 hours;

4.4 Technical Specifications

AIR CLEANING EFFICIENCY:

- VOCs : complete reduction in several passes without ozone generation;
- H1N1 virus: 99% reduction in 1 pass, 99.99% in two passes;
- Staphylococcus Epidermidis bactéria: 87% reduction in 1 pass;
- Aspergillus Brasiliensis fungus: 86% reduction in 1 pass.

ELECTRICAL POWER:

- Voltage : 230V ;
- Power maxi : 700 W.

AIR FLOW RATE:

- 400 to 1100 m³/h.

SOUND LEVEL :

- < 50 dBA at 2 m in free field

FRONT INDICATIONS :

- Operating ;
- Operating speed selected;
- The state of the various treatment functions;
- Maintenance alertes.
-

GERMIRCLEAN OPTIONS:

- HMI for remote communication and operating status of the device directly visible on the digital display ;
- HMI with possibility of broadcasting audio and video messages;
- Customization of the envelope (painting or mirror polish).

5. INSTALLATION

GERMIRCLEAN can be installed in any room with a minimum ceiling height of 2.5 m.

To optimize the area of action of the appliance, the ventilation grille of the upper part has 2 groups of independent blades that guide the flow of discharge air. This part can be preset from the factory according to the future installation of the device if it is known, or adjusted on site.

BEWARE !

The appliance must be placed in such a way that the air inlets and outlets are not obstructed by any element such as a wall, furniture ... Otherwise, the treatment performances are no longer guaranteed.

Warning

The performance of the device is guaranteed only as part of the recommendations given by UVGERMI during the technical study.

6. ELECTRICAL CONNECTIONS

The GERMIRCLEAN has a 230V single-phase socket (2 poles + ground). Therefore, no special precautions are to be taken except to make sure that all the circuit breakers are properly raised and that the lamps are properly connected.

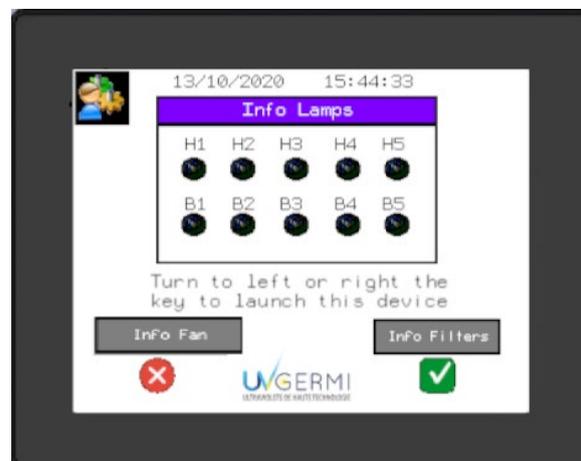
The device thus connects as a conventional appliance.

The line to which the plug is connected must be protected by a 16A 30mA differential circuit breaker.

7. OPERATION

General :

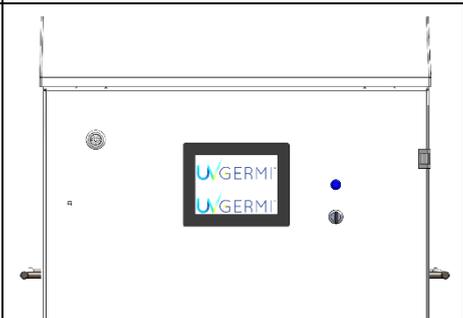
When switching on the GERMIRCLEAN, the blue light comes on, as well as the touch screen. The screen displayed is as follows:



As long as the key is not turned to the right or to the left, the fan and UV lamps remain off.

Turn the "PV / 0 / GV" key switch to PV (Left) if you want to run the GERMIRCLEAN at low speed or to Main (Right) if you want to run it at high speed. To stop the RCLEAN, set the switch to 0 (Center).

See the illustrations in the table below.

Low Speed (LS)	Stand By	High Speed (HS)
		

The air flow rates rates corresponding to low and high speed can be set by the user. See the mixing flow rate adjustment procedure.

When the key is turned to the left or to the right, a message "Start on going ..." appears on the screen for 3 seconds. This time is due to the fan delay.

Warning The device's mixing flow rate can vary between 400 and 1100 m³ / h
Frequent Stops/Starts (> 6/ 24 hours) are prohibited because they reduce the lifespan of UV lamps and ballasts.

When the device is operating the interface presents the following screen:



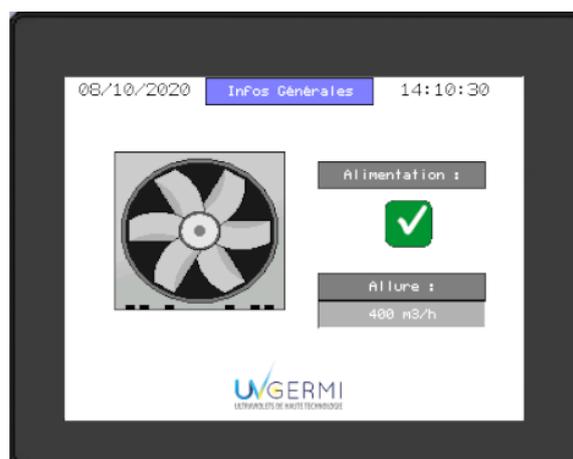
This screen gives the operating status of the UV lamps:

- Green dot when the lamp is on and working correctly;
- Red dot when the lamp is off due to a failure (see § 9).

At the bottom left of the screen a dot indicates the operating status of the fan:

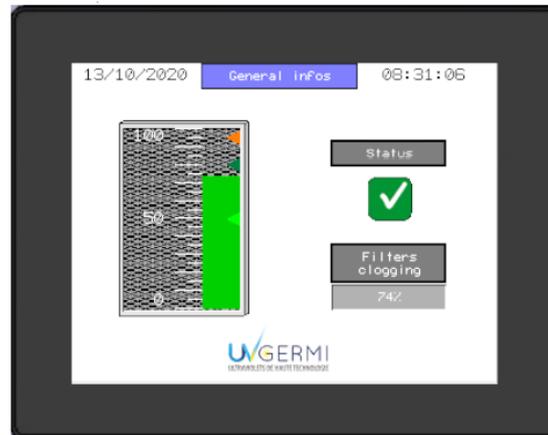
- Green dot if the fan is working properly
- Red dot if the fan is stopped due to a failure (see § 9)

By clicking on the fan point, you can access a screen indicating the flow rate:



At the bottom right of the screen a point indicates the state of the filters:

- Green dot if the filters are not clogged
- Red dot if the filters are clogged and need to be changed (see § 9)



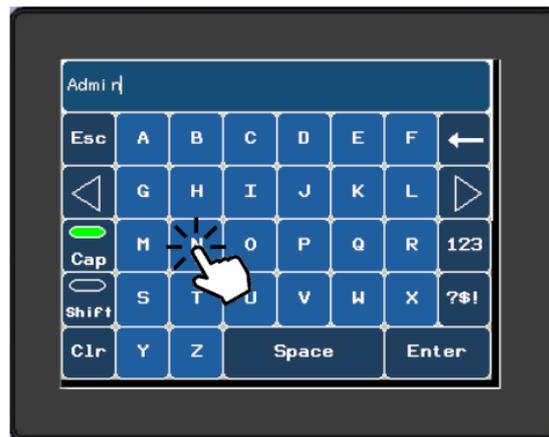
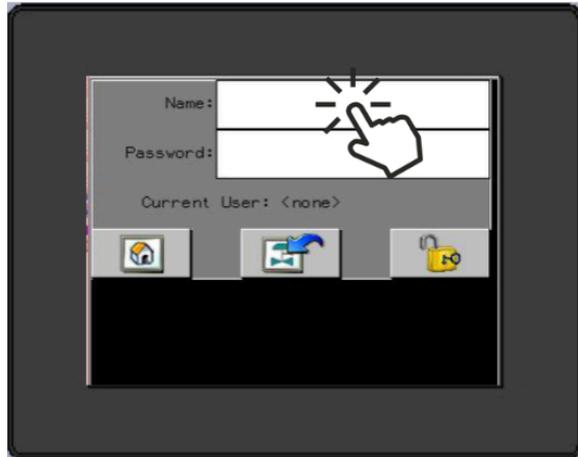
By clicking on the filter point, you can access a screen indicating the percentage of fouling:

PROCEDURE TO ACCESS THE SETTINGS MENU:

Step 1 : Click on the top left corner of the screen.



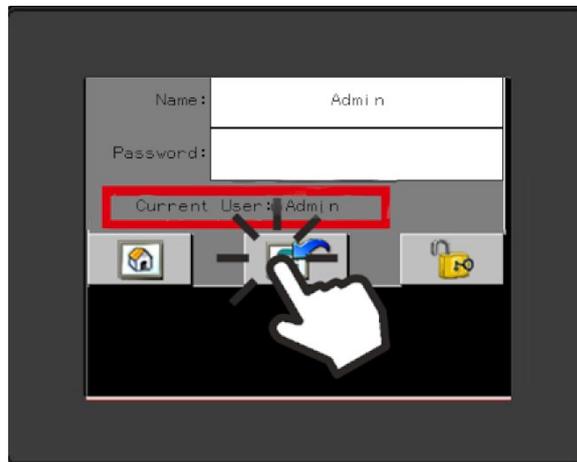
- Step 2 :**
- A) Press the text box to complete, to display the keyboard.
 - B) Enter the name: " Admin " 'and the password:' '19240' '



Step 3 : Press the padlock to validate



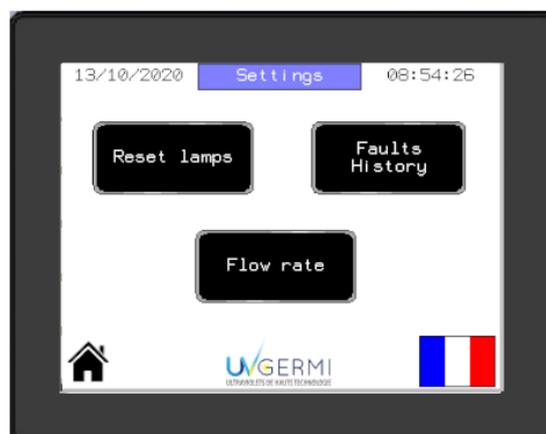
Step 4 : Verify that the current user is "Admin" and press on the middle button.



Warning Access to the parameters menu is possible for 1 minute after entering the login and password. Beyond this time, you must repeat steps 2 to 4

Step 5 : Repeat step 1.

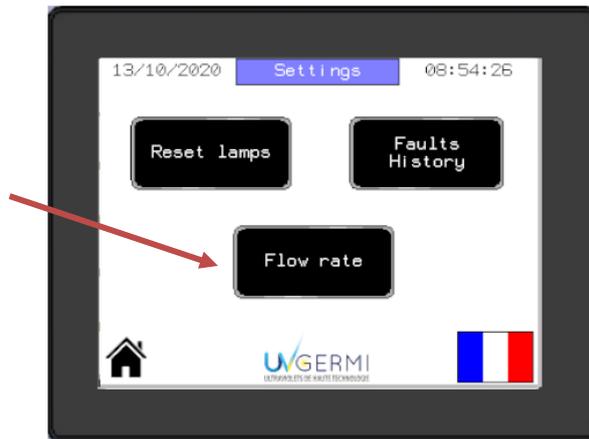
Step 6 : Here you are on the screen corresponding to settings menu.



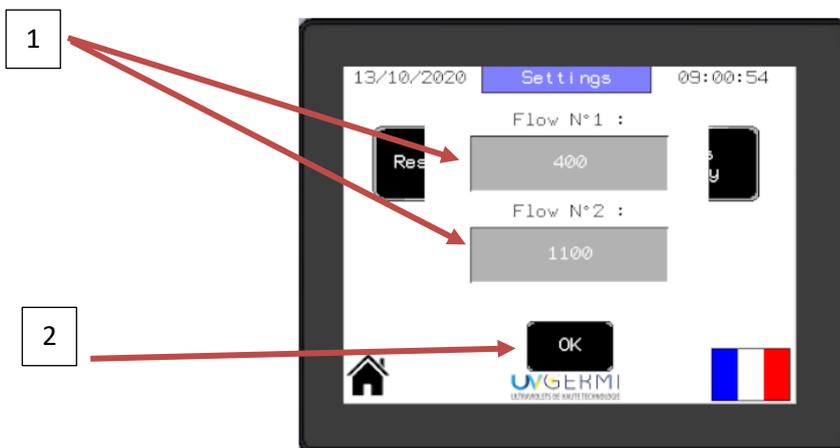
PROCEDURE TO SET AIR FLOW MIXING RATES :

Step 1 : Join « Settings » menu.

Step 2 : Click on « Flow rate » button



Step 3 : Click on the flow rate to configure box and enter a flow rate between **400 and 1100 m3/h** then press OK.



8. PREVENTIVE MAINTENANCE



The unit must be disconnected from its power supply before any maintenance work.

8.1 UV lamps

Intensity losses occur when UV lamps reach the end of their lifespan (about 20% loss of intensity) or when one of them is defective. They need to be replaced (see paragraph 12.4 & 12.5)

When UV lamps reach 8,000 hours of operation, an alert is generated. You must plan to order replacement UV lamps. The lamps are given for a lifetime of 9000 hours.

For the standard version device, a red indicator light on the front of the device will illuminate. The defect is extinguished once the lamps have been changed and after pressing the “RESET” button (see paragraph 9.1).

For the communicating version device, a message appears on the touch screen. The message disappears once the lamps are changed and the “RESET” procedure is performed (see paragraph 9.3).

Warning It is possible to perform the “RESET” procedure without changing the lamps but in this case the performance of the device is no longer guaranteed.

If your device unit is equipped with several UV lamps, they must all be replaced at the same time (even if they still work), when their lifespan reaches 9,000 hours.

When replacing the UV lamps, take care not to touch the UV lamps with bare fingers, gloves are provided for this step. Cleaning the UV lamp with alcohol will remove all traces of perspiration left by your fingertips.

Note: Similarly to fluorescent tubes, a faulty UV lamp must be disposed of according to national regulations. It should not be disposed of with domestic or industrial waste (UV lamp contains mercury).
Return it to the manufacturer or send it to a waste collection centre.

8.2 Filters

When filters are fouled an alert is generated to prevent a loss of efficiency in the volume of air treated and in the reduction of odors and micro-organisms. This defect is more or less recurrent depending on the environment in which the GERMIRCLEAN is used.

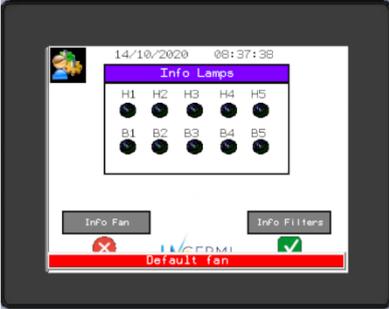
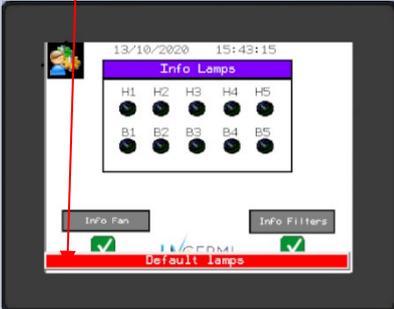
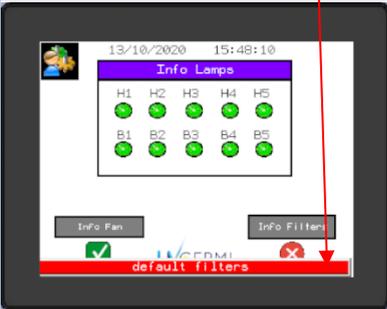
The message appears on the touch screen. The message disappears once the filters are changed (see sections 12.2 and 12.3).

Warning In any case, even if no alert appears, it is advisable to change the filters at least every 6 months.

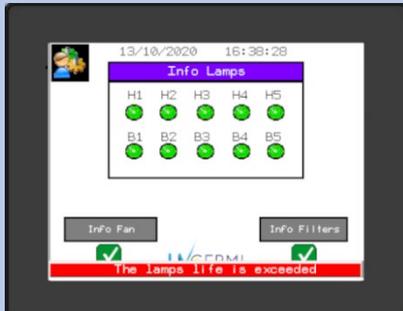
9. TROUBLE SHOOTING



The unit must be disconnected from its power supply before any maintenance work.

TROUBLES	POSSIBLE CAUSES	SOLUTIONS
<p>The message « Default fan » is displayed</p> 	<ol style="list-style-type: none"> 1. The fan is not powered 2. Fan is improperly electrically connected. 3. The pressure sensor has a defect. 4. Others. 	<ol style="list-style-type: none"> 1. Check the position of the fan circuit breaker. 2. Disconnect/reconnect fan connectors, 3. Check if pressure sensor is well connected and hoses for leaks (cuts). 4. Contact the after-sales service or your installer.
<p>One or more UV lamp dots are off and the message " Default Lamps" is displayed.</p> 	<ol style="list-style-type: none"> 1. The UV lamp is improperly connected. 2. The UV lamp is defective. 3. The power is off 4. One of the electrical components is defective (electrical board, ballast, light bulb, circuit breaker. etc.) 	<ol style="list-style-type: none"> 1. Check the connection. 2. Replace UV lamp (see chapter "Replacement of UV lamps"). 3. Switch on the power 4. Contact the after-sales service or your installer.
<p>The message « Default filters » is displayed</p> 	<ol style="list-style-type: none"> 1. An element obstructs the suction grid. 2. The filters are clogged. 3. The pressure sensor has a defect. 4. Others 	<ol style="list-style-type: none"> 1. Check that nothing obstructs the suction grilles (immediate proximity of a wall, sheet or other element to the grids) 2. Change the filters (see chapter changing the filters). 3. Check if pressure sensor is well connected and hoses for leaks (cuts). 4. Contact the after-sales service or your installer.

The message « Lamps life is exceeded » is displayed



The top/bottom UV lamps are 1,000 hours from their end of life.

Order and replace new UV lamp (see chapter "Replacement of UV lamps").

Reference for top UV lamps:

Ref UVGERMI : 15000363

Reference for bottom UV lamps:

Ref UVGERMI : 14000101

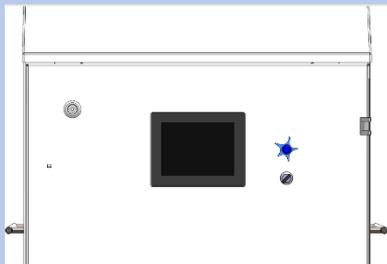
If screen does not turn on or respond



1. If screen does not turn on
2. If screen does not respond (touch screen)
3. Others

1. Check if the power plug of the screen is connected
2. Disconnect all the plugs on the screen except those of the power supply and restart the device. Check if tactile is back
3. Contact the after-sales service or your installer.

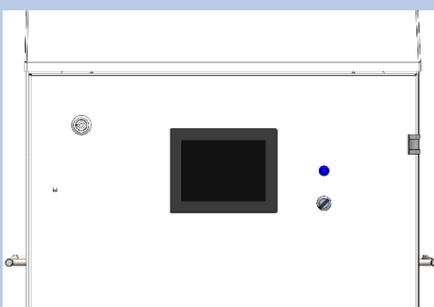
If the screen sounds and the blue light is on



The screen does not turn on and emits an audible signal

Wrap the screen correctly in its base

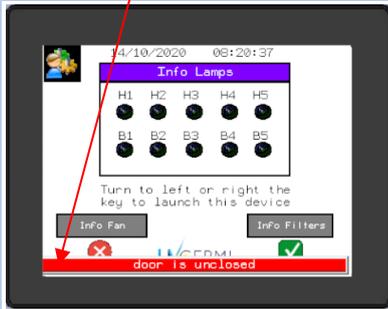
If blue light and screen are off



1. The circuit breaker ID1 is down
2. The device is not powered
3. One of the electrical components is defective (electrical board, ballast, light bulb, circuit breaker, etc.)

1. Reset the ID1 circuit breaker
2. Plug in the device
3. Contact the after-sales service or your installer.

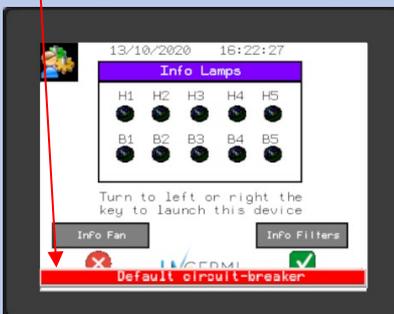
The message «Door is unclosed» is displayed



1. Device door is improperly closed
2. One of the electrical components is defective (electrical board, ballast, light bulb, circuit breaker, etc.)

1. Check that there is no gap between the door and the cabinet body. Check that the locks are locked
2. Contact the after-sales service or your installer.

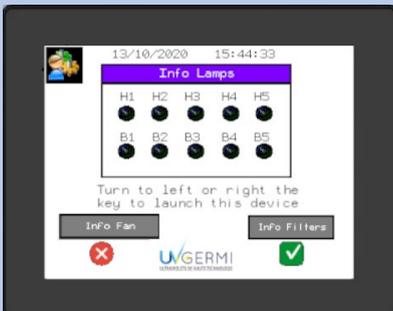
The message « Default circuit breaker » is displayed



1. Circuit breaker is down
2. One of the electrical components is defective (electrical board, ballast, light bulb, circuit breaker, etc.)

1. Pull up the breaker
2. Contact the after-sales service or your installer.

Device off



1. Key is not in position on
2. One of the electrical components is defective (electrical board, ballast, light bulb, circuit breaker, etc.).

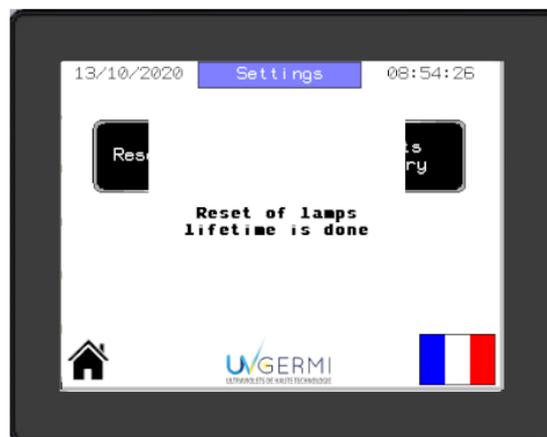
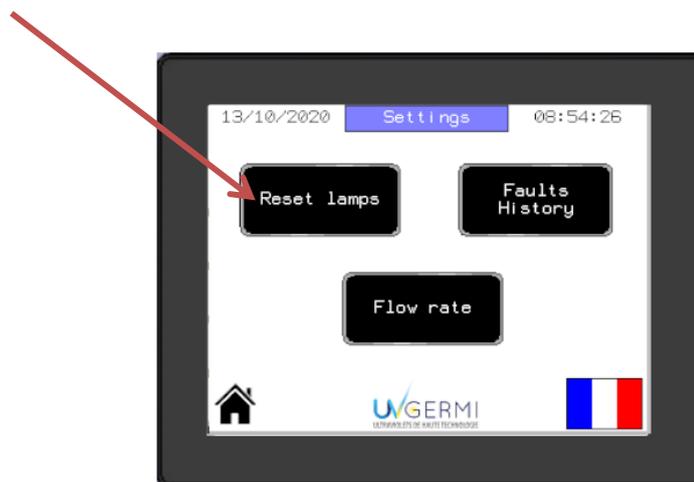
1. Turn the key
2. Contact the after-sales service or your installer.

Lamp operating time « RESET » procedure

Resetting the lamp operating time counter is carried out as follows:

Step 1 : Join « Parameters » menu (see § 7)

Step 2 : Click on « Reset lamps »

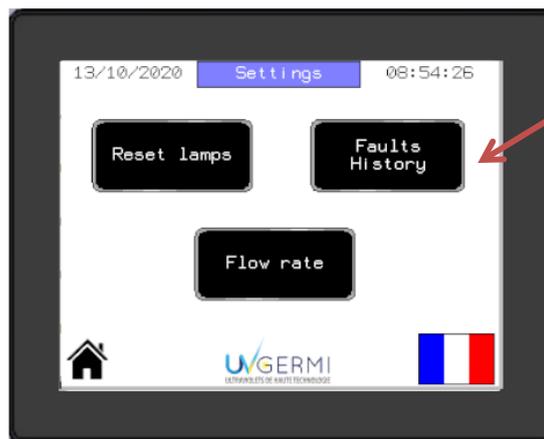


Procedure for viewing the fault history

It is possible to list all the faults that may have appeared since the device was put into operation. This list is deleted when the device is stopped.

Step 1 : Join « Parameters » menu (see § 7)

Step 2 : Click on « Faults history » button



Step 3 : The list of faults appears on the screen.



10. PARTS LIST

Designation	Quantity	UVGERMI Reference
GermiR Clean (general)	1	Serial number
Intake Grille 400*400	2	18000508
Discharge Grille 500*200	1	18000509
Intake Filter 385*385*48	2	18000510
Discharge Filter 485*185*69	1	18000511
Door sensor	2	15000264
Door sensor support	2	18000498
Pressure sensor	1	18000512
Contact Key 3 positions	1	8772009
Blue led 230V	1	17000567
Connecteur 4 points F	2	2906562
Bottom lamps	5	18000729
Top lamps	5	14000101
Fan	1	15000363

11. WARRANTY

The warranty of GERMIRCLEAN devices is applicable according following conditions :

External envelope:

- 5 years for the stainless steel cabinet body (material and welds) except when used in a very corrosive environment or atmosphere (brackish or very salty effluent, sea water, close to acidic and corrosive products).

Exclusion from warranty:

- Damage caused after-transport and delivery handling, by an operator or other third party not affiliated with UVGERMI ;
- Air filters (consumables)
- Failure to comply with installation, operating and maintenance instructions;

Electrical:

- 2 years for all the components including pressure sensor, except the UV lamps (consumables) and the quartz sleeves if broken.

Exclusion from warranty:

- Electrical components are not guaranteed against power surges or lightning ;
- Any modification and additions of components to the electrical cabinets ;
- Use of replacement parts which are not original UVGERMI parts ;
- Non-compliance with installation, operating and maintenance instructions ;
- Cabinet with a stop / run frequency greater than 6 per 24 hours.

Warning

In case of use of parts other than those recommended by UV GERMI, in particular for consumables such as UV lamps and filters, the performance of the device can no longer be guaranteed.

UV lamps and filters are not guaranteed against breakage.

Faulty parts will be returned specifying the type and serial number of the unit to UVGERMI where it will be replaced after a technical assessment.

- Shipping costs will be shared between the dealer and UVGERMI.
- The warranty takes effect on the day the unit is installed: UVGERMI must be informed of this date by mailing or faxing the installation sheet.
- In case of non-compliance with the instructions for installation and use, UVGERMI cannot be held liable and the warranties cannot be implemented.

12. CORRECTIVE MAINTENANCE

12.1 Before any intervention



ATTENTION!!

Before any maintenance work disconnect the device from its power supply



Safety Measures

Precaution to take
before working on the device



- To avoid any electrocution risk,
disconnect the unit
from its power supply



- Ultra-violet rays
Never look at lamps without
protection



Wear UV protection glasses



Wear gloves



Wear a dust mask

12.2 Replacement of input filters

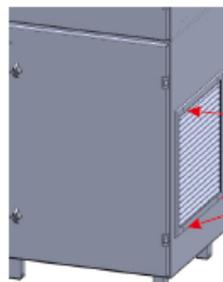
There are 2 intake filters. They are located in the lower part of each side of the appliance, behind the suction grids.

Intake filter change Reference : 18000510

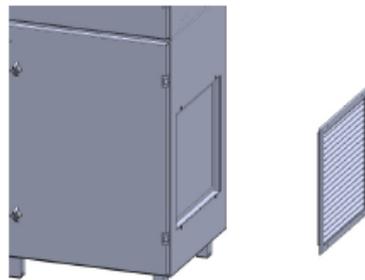


ATTENTION!!

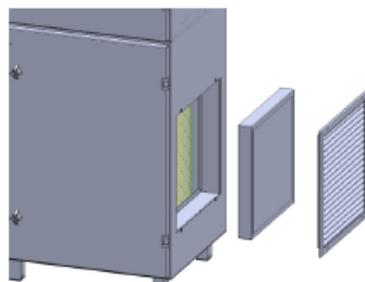
Before any maintenance work disconnect the device from its power supply



Remove the 4 screws



Pull out the grille



Remove the old filter and replace it by the new one

Reassemble following the reverse procedure

Be careful to respect the flow direction



12.3 Replacement of output filter

There is only one discharge filter. It is located in the upper part of the appliance, behind the discharge grid.

Discharge filter change

Reference : 18000511

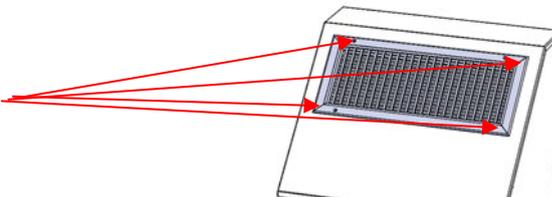


ATTENTION !!

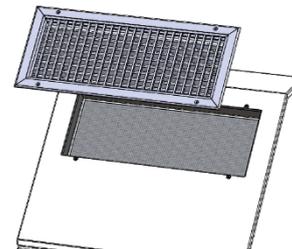
Before any maintenance work disconnect the device from its power supply



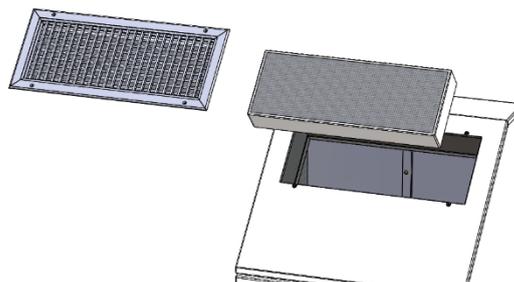
Remove the 4 screws



Pull out the grille



Remove the old filter and replace it by the new one



Reassemble the new filter using the reverse procedure
Be careful to respect the flow direction



12.4 Replacement of UV lamps in the upper part

Five reactors are present in the lower part of the apparatus. Each reactor contains a lamp. To access the lamps it is first necessary to remove the reactors from the apparatus.

Removing of the reactor

Référence : 18000425



ATTENTION!!

Before any maintenance work disconnect the device from its power supply



<p>Open the front door and unplug UV lamps connections (*5)</p>	
<p>Unscrew the tightening knobs (*4)</p> <p>Tilt and remove the retaining plate to release the reactors</p>	
<p>Remove the reactors</p>	
<p>Reassemble following the reverse procedure. Position the plate by aligning each reactor in the location provided for this purpose. Screw the tightening knobs. Plug the connections.</p>	

Each lamp must then be extracted and replaced in accordance with the following procedure:

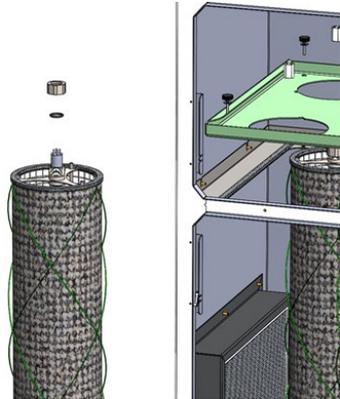
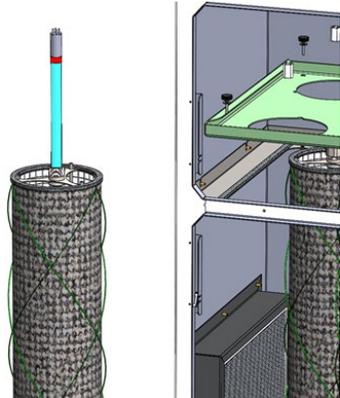
Change a UV lamp of a reactor

Référence : 14000101



ATTENTION!!
Before any maintenance work disconnect the device from its power supply



Remove the reactors	
<p>Unscrew the lamping clamp nut</p> <p>Remove the O-ring</p>	
<p>Remove the old lamp</p>	
<p>Reassemble with the new lamp following the reverse procedure</p> <p>Reset the hour counter of the operating time of the lamps, see § 9</p>	

Warning : When replacing the UV lamps, take care not to touch the UV lamps with bare fingers, gloves are provided for this step. Cleaning the UV lamp with alcohol will remove all traces of perspiration left by your fingertips.

Note : Similarly to fluorescent tubes, a faulty UV lamp must be disposed of according to national regulations. It should not be disposed of with domestic or industrial waste (UV lamp contains mercury). Return it to the manufacturer or send it to a waste collection centre.

12.5 Replacement of UV lamps in the top part

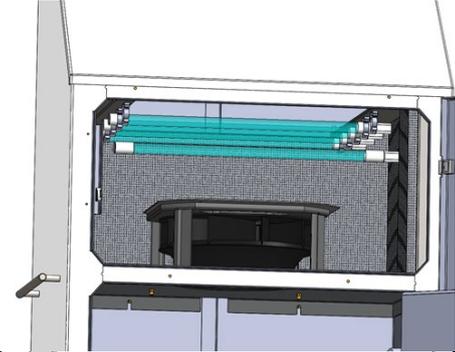
Five UV lamps are present in the upper part of the appliance upstream of the discharge grid.

Change of a lamp in the top part Reference : 15000363



ATTENTION!!
 Before any maintenance work disconnect the device from its power supply



<p>Open the door</p> <p>Unclip carefully the lamp by pulling it downwards</p>	
<p>Remove the lamp downwards and unplug it</p>	
<p>Take out the old lamp</p>	
<p style="text-align: center;"> Install the new lamp following the reverse procedure Reset the operation time of the lamps, see § 9 </p>	

Warning : When replacing the UV lamps, take care not to touch the UV lamps with bare fingers, gloves are provided for this step. Cleaning the UV lamp with alcohol will remove all traces of perspiration left by your fingertips.

Note : Similarly to fluorescent tubes, a faulty UV lamp must be disposed of according to national regulations. It should not be disposed of with domestic or industrial waste (UV lamp contains mercury). Return it to the manufacturer or send it to a waste collection centre.

12.6 Fan replacement

The appliance only contains one fan.

Change of the fan Reference : 18000499



ATTENTION!!

Before any maintenance work disconnect the device from its power supply



<p>Open the door</p> <p>Unplug fan connections</p>	
<p>Unscrew and remove the fan with its protection plate</p>	
<p>Unscrew and remove the protection plate</p>	
<p>Take a new fan and reassemble following the reverse procedure Reset the default see § 9</p>	

13. RECYCLING

A faulty UV lamp must be disposed of according to national regulations. It should not be disposed of with domestic or industrial waste (UV lamp contains mercury).

You may return it to the manufacturer (or the reseller) or take it to a recycling centre.

Our units are designed to last, but when out of order, they can be dismantled and their components recycled.

For the recycling of this professional electrical and electronic equipment at the end of its life, please comply with local regulations.



recylum
engagés pour un recyclage responsable



UVGERMI[®]
ULTRAVIOLET HIGH TECHNOLOGY
*The ultraviolet technology's specialist
for air treatment.*

● ○ ● FRENCH MANUFACTURE

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