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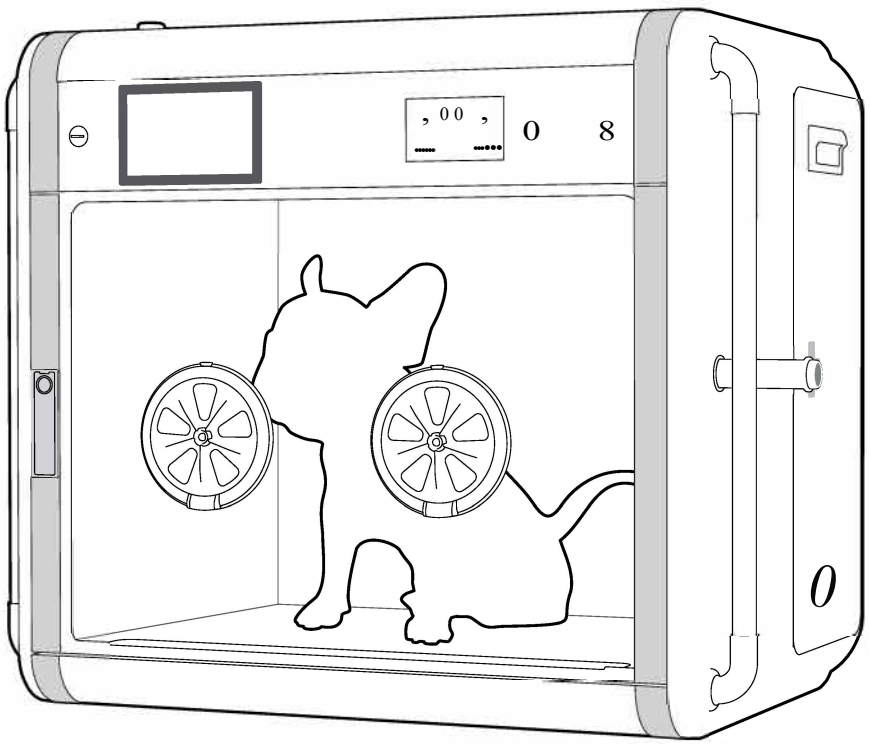
Care Cradle

CURADLE 160

User's manual for PRO PLUS

Model : PX-ICU 160+ (Without IP camera)
PX-ICU 160C (IP camera included)



CURADLE

To improve the performance of the product, specifications are subject to change without prior notice.

Small animals Incubator/ Brooder Curadle Pro+ PX160C ICU User Manual

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The manufacturer or distributor is not responsible for any life loss or property damage caused by user's carelessness, alteration, change of purpose, power failure, natural disaster, etc. To avoid errors, please read the user's manual carefully before use.

Marks and Symbols

&, CAUTION: a caution sign about mistakes that may cause life loss of animals and damage to property, failure or damage etc.

Indicates prohibition

@ I dicates disassembly prohibition

Indicates the matters that you must follow

Indicates that the power plug should be removed from the outlet

Tip : This is a tip sign indicating notes or references that are useful to know when using this product.

A.CAUTION Indicates that there is a possibility of injury or material damage such as buildings or fixtures when the instructions are violated

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• CURADLE PRO PLUS 160

CURADLE is a next-generation smart pet incubator developed based on Autoelex's long experience and accumulated know-how. With the latest digital technology, it is designed and manufactured to create the optimal environment suitable for animal patients. However, it is the responsibility of the user to set up the device correctly and maintain the optimum settings, depending on the external environment (temperature, humidity, noise) and he health condition of the animal patient. Be sure to read this manual carefully before use to ensure proper use of the device. For questions or matters that you cannot understand, please contact the place of purchase.

• Features of CURADLE PRO PLUS 160

[Main Function]

* Exterior design and GUI, providing stability and confidence
* Reflects veterinarian's opinions taken at the product concept, leading to optimized design for actual medical situations
* Large, touch-screen LCD
* Automatic control and settings for Temperature, Humidity, Carbon Dioxide
* Floor Cooling System
* Control and setting of 02 concentration
* Stainless material, easy to sterilize for effective sanitation management
* Highly reliable intelligent electronic control system that automatically controls indoor environment
* Auto Ventilation function to lower carbon dioxide concentration
* Double insulated structure and ability to distinguish bottom temperature from air temperature, which makes the machine's inside temperature more accurate
* Transparent tempered glass window to easily check the condition of the pet

[Easy Function]

* Treatment time settings and alarm function
* LED indoor lamp, IR lamp and UVC(Preventing Spread of Viruses) lamp
* Quick button on the home screen for easy control of three kinds of lamp, fan and Timer functions
* Modular assembly for easy repair and replacement of parts
* Hand access to enable pet treatment without opening the window
* Built-in outlet to power external devices
* Stand Pole to easily install various devices
* GUI with enhanced stability and confidence, providing multi language (English, German, Spanish, Portuguese, Russian, Korean, Chinese, Japanese, Arabic)

[Safety Function]

* BLOC Fan is embedded in the incubator to control indoor-environment
* Independent humidity system, which is easy to use and manage
* Built in Alarm function in case of machine failure(abnormal high temperature, abnormal high concentration of carbon dioxide)
* Designed to stack machines on two levels for space efficiency
* IP camera function for real-time internal video viewing on mobile and smart phone (PX-ICU160C model}
* Detachable wheels for convenient moving (optional}

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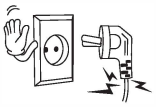
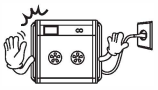
• Electrical hazards

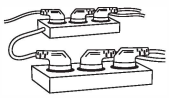
ACAUTION



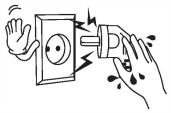
O Do not use a damaged power cord or loose outlet.
Risk of electric shock or fire.



(SI Never unplug when using the unit. Operation interruption may result in loss of life inside the unit.



O Do not insert multiple connecting plugs in an outlet. Risk of fire or electrical overload.



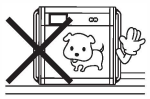
O Do not pull the cord when taking out the power cord, and keep wet hands away from connecting plug. Risk of electric shock or fire.

O Do not twist or crush electric cord. Risk of electric shock or fire.

• Installation, use related precautions

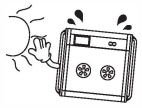
ACAUTION

O Do not put a person in the product. He/she may be hurt or killed.

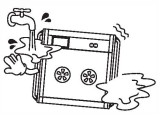


O Do not turn off the power while your pet is in the device. It may be hurt or killed.

O Do not install in dusty or dirty places. Dust or foreign matter may cause electric shock or fire.



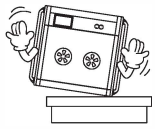
O Do not install the product in direct sunlight. There is a possibility of discoloration of the case and rapid temperature rise may cause death of the animal.



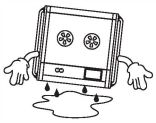
O Do not install in wet or humid places. There is a risk of electric shock or fire if water gets inside.

O Avoid places that are too cold or hot and do not place fire or heat machines near the product. There is a risk of fire.

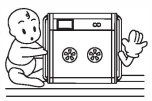
O Do not place the power cord near sources of heat. The coating on the cord may melt and cause fire or electric shock.



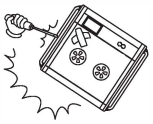
O Please install it firmly when installing on cabinet or shelf. Falling or a fall of the product may cause malfunction and serious injury.



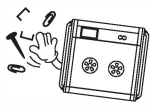
O Do not place the product upside down. The product may be damaged.



O Do not allow children to climb on the product. A fall of the product may cause injury or death.



(ti Never disassemble, repair or modify the product as you please. It may cause electric shock and fire. If you need repair, please contact a service center.



O Be careful not to let foreign substances into the external hole of the product. It may cause electric shock, fire, and physical injury.

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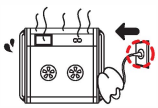
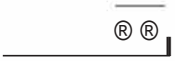
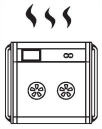


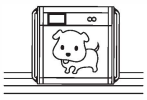
S If any unusual sounds or smoke appear on the product, unplug it immediately and contact a service center. It may cause electric shock or fire.



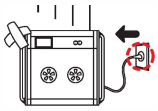
0 Be careful when opening or closing the door of a product because people around you or your pet may run into the door and get injured.



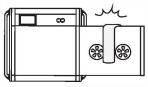
0 Do not block the vent on the back. Poor ventilation may cause internal temperature rise leading to failure and fire.



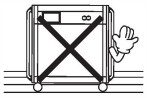
O Please use only one pet per product.



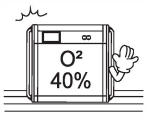
S If you drop it or the case is broken, disconnect the power plug and contact the service center. Using as it is may cause electric shock or fire.



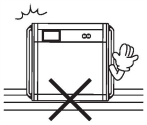
O Do not hang anything on the door. The glass may be broken or the door may be out of order.



0 When installing the wheel, install it to be horizontal to the ground. The door may not close or may not open smoothly.



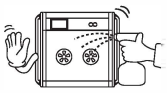
0 If you inject more than 40% of oxygen concentration, there is a risk of fire caused by nearby fire or electrics (sparks).



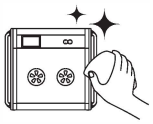
0 Do not block the cooling device vent fan under the machine. Cooling performance may deteriorate.

• Cleaning related precautions

ACAUTION

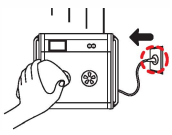


0 Do not spray cleaning chemicals directly onto the interior or exterior of the product. Spraying directly may increase the possibility of discoloration, cracking, peeling of the printed surface.

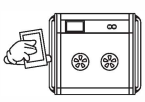


0 Disinfect the inside chamber of the machine periodically with a gauze moistened with disinfectant (alcohol etc.). Do not disinfect directly with torch or fire.

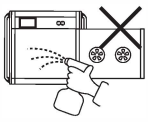
O Wipe the dust on the power plug's pins and contacts with a dry cloth. It may cause electric shock or fire.



S When deaning, be sure to *remove* the power cord and clean it with a soft cloth. Do not use chemicals such as wax, benzene, alcohol, thinner or lubricant etc.



0 At least once a year, please contact our service center or customer service center to check the machine. Failure to clean dust inside the product for a long period of time may cause fire or malfunction.



O Do not spray water, cleaner, disinfectant or chemicals onto oxygen or carbon dioxide sensor hole. It may cause a malfunction of the sensors.

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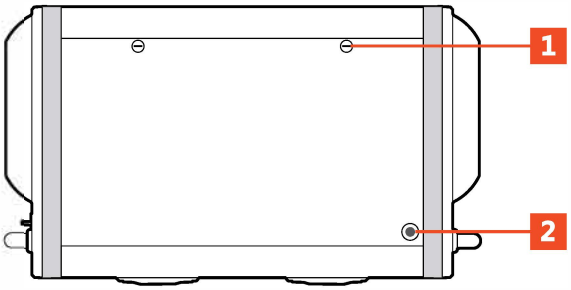
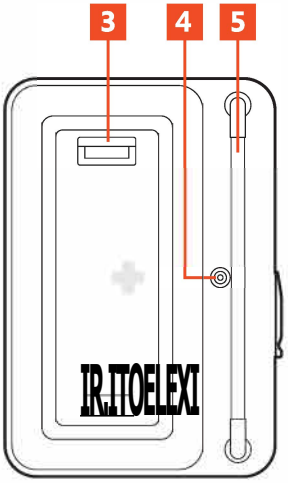
• Identification of Parts

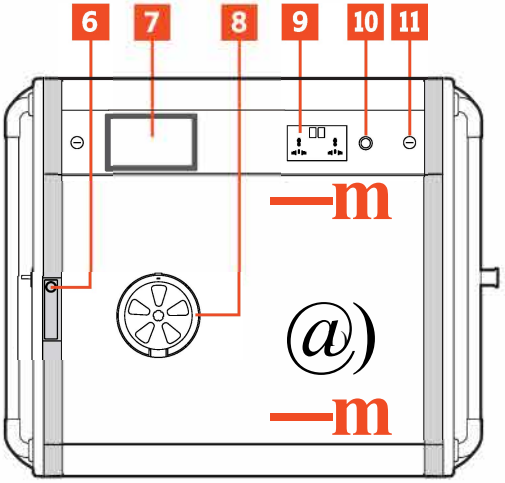
Serial NO. is listed on the top of the product (e.g. CUROOOOOOO). This is the unique product number.
If it is damaged, you cannot receive A/S.



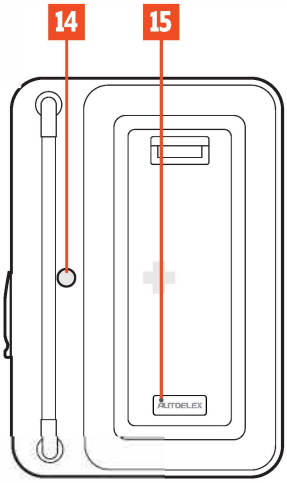
Top



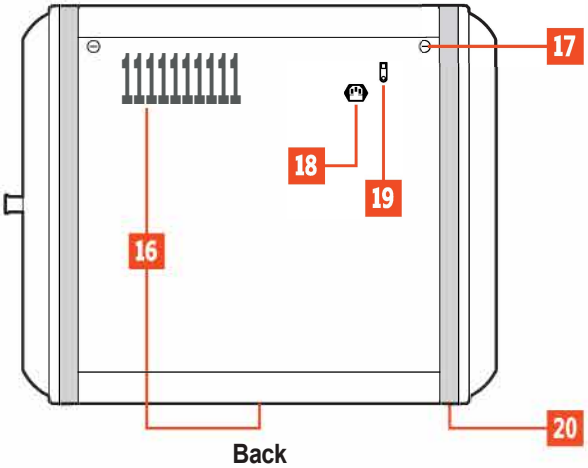
Left



Front



Right



Back

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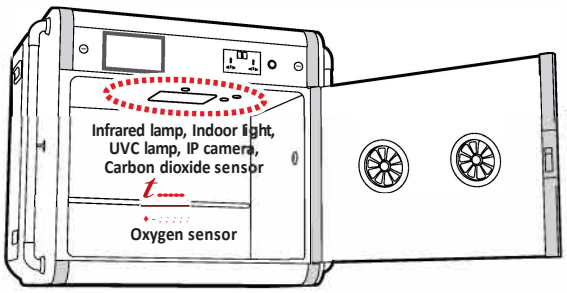
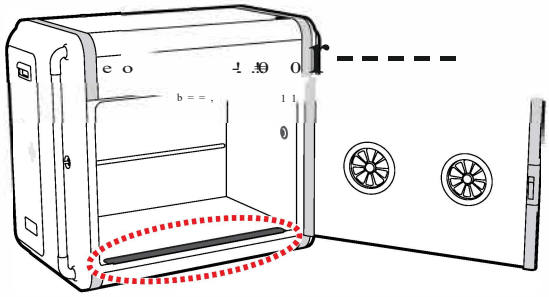
<Inside: Infrared lamp, Indoor light, UVC lamp, IP camera, Sensor part>



<Inside: Waste tray>

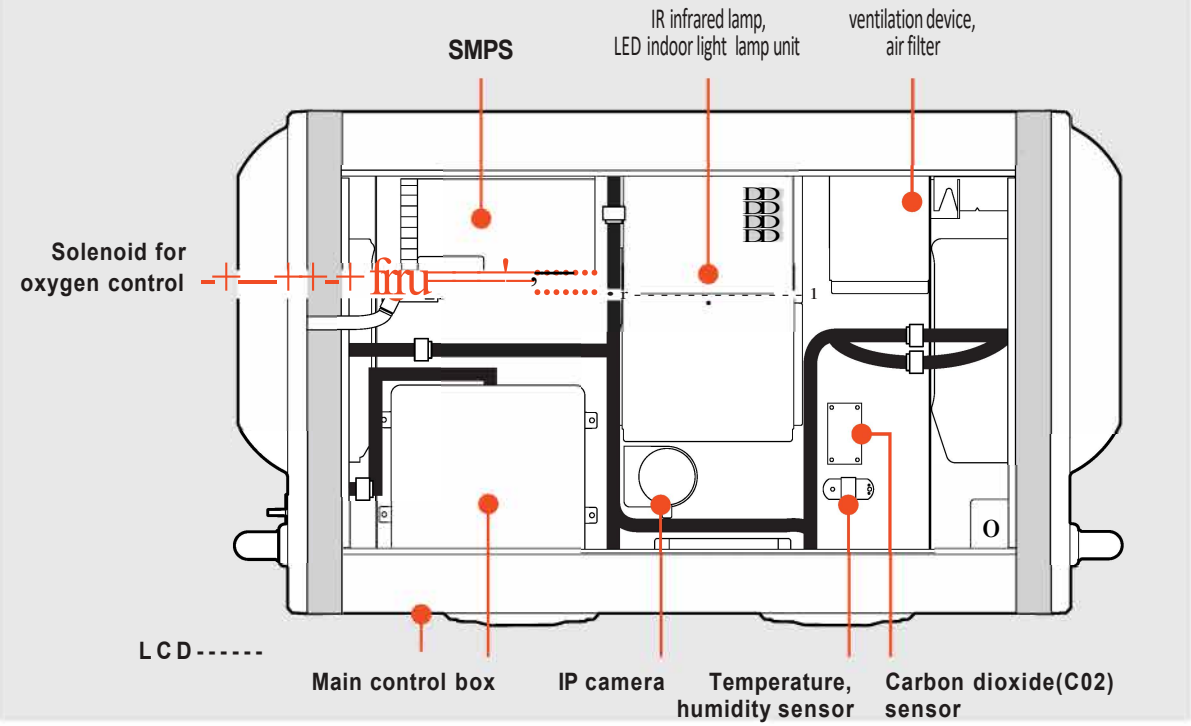


D Upper locking lever - Both sides
fl Ring holder hole
D Handle - Both sides
I] Hole to link with oxygen regulator
I) Stand Pole(holderforperipherals)- Both sides
mi Door lock
D LCD touch screen

B Hand access window
Ill Exteral outlet(2 outlets)
IIIJ Power button
m Front locking lever - Both sides
[fJ Inside: IR infrared lamp, LED indoor light, UV-Clamp, IP camera, CO2 sensor, 02 sensor
m Inside: Chamber, Waste tray

[9 Humidifier connector
nJ Humidifier power terminal
m Vent fan and air-conditioner
m Rear locking lever· Both sides
[[) Power input socket
II] Short circuit breaker
m Rubber foot

<When the upper locking lever is released - Maintenance part>



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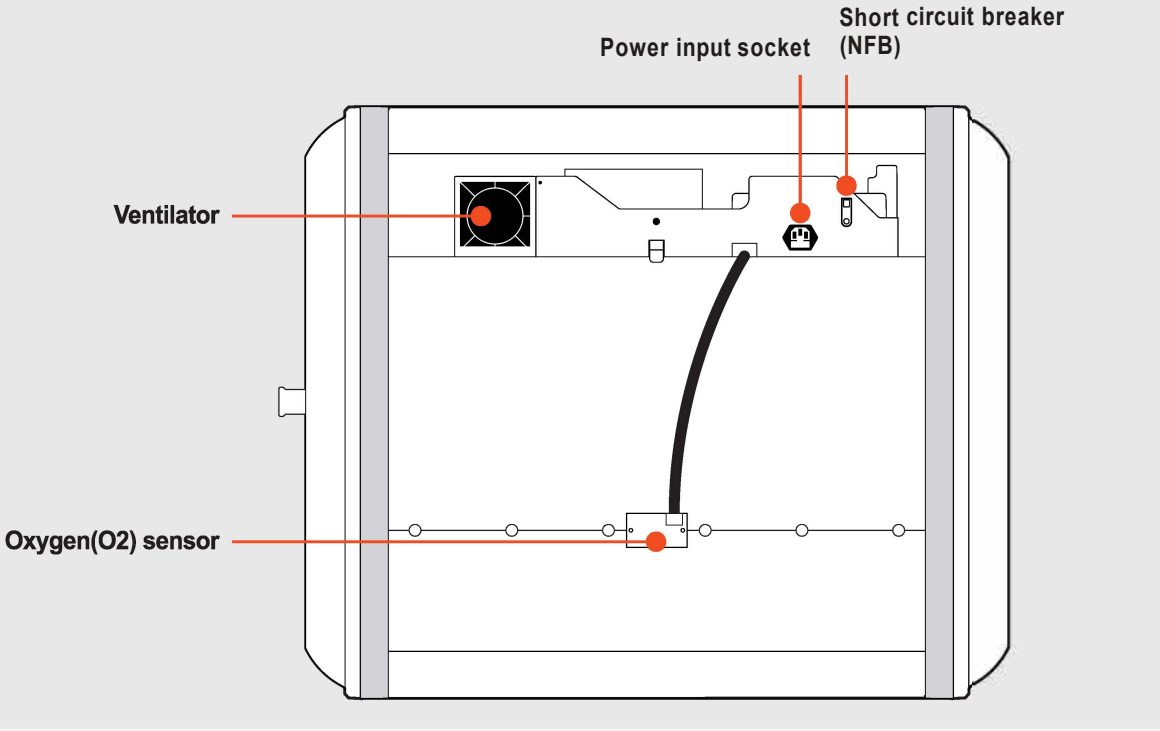
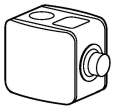
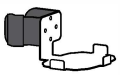
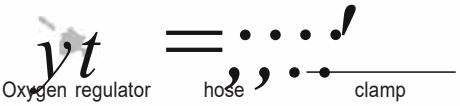
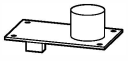
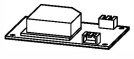
<When the upper locking lever is released - Maintenance part>



• Basic Components

* CURADLE PRO PLUS 160 does not contain an oxygen tank
* You can buy additional consumables such as air filters, lamps, and various sensors from the place of purchase.
The replacement cycle of the installed oxygen sensor and carbon dioxide sensor is on average 1 year.
To maintain the accuracy of the sensor, please exchange it every year after purchase.
[See Sensor Replacement Method on 28 ~ 29P]

		* 1 of 2 mounted			
Manual	Power cord	2 air filters	Ringer holder	Wrench	Rubber Foot (Mounted)
 Humidifier body Connection socket Power cord Bottled water coupling part  Humidifier clamp Bottle				Infrared Lamp (Mounted)	LED Indoor Light (Mounted)
Humidifier set					
 Oxygen regulator hose clamp door seal			 Oxygen Sensor (Mounted)	 CO2 Sensor (Mounted)	Nebulizer (Sold Separately)
Oxygen regulator set					

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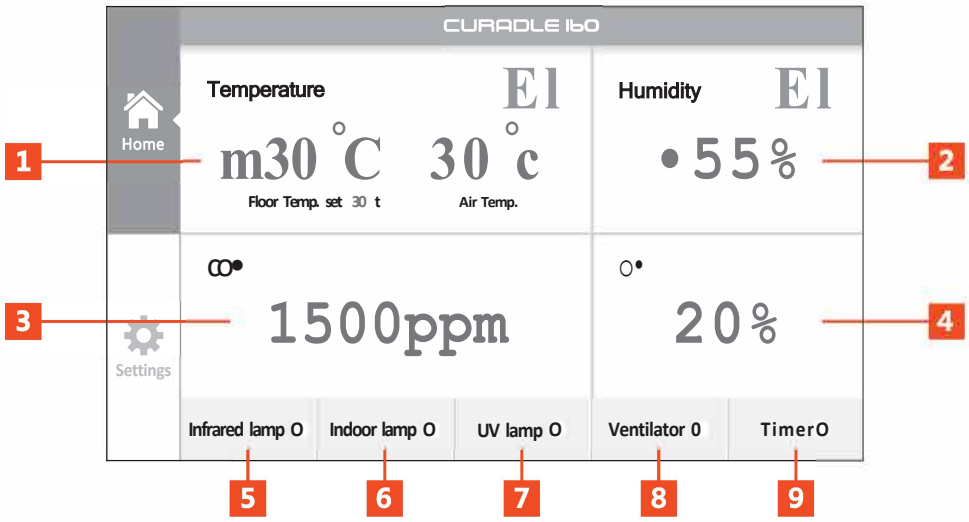
- **Name and function of home screen**



Select Home in the left tab of the screen

D Temperature display window	Temperature unit operation switch. El: On state : Off state
	The figure shows the internal floor temperature and air temperature. [Floor temperature Initial value: 30℃] [Celsius/ Fahrenheit Initial value: C Celsius] You can set the floor temperature setting value and Celsius / Fahrenheit unit by touching the figure. The air temperature shows the current air temperature inside the chamber and the air temperature is changed by the heater or cooling device.
	IU : Flickers when the floor heater is operating
EJHumidity display window	Humidifying device operation switch. El :On state : Off state
	The figure shows the internal humidity. [Humidification setting Initial value: 55%] [Ventilation setting Initial value: 60%] Touch the figure to set the desired humidity. If the humidification is higher than the set level, the ventilator will operate. Ventilator operating criteria can be changed as you please.
	IC : Flickers when the humidification unit is operating
LJ Carbon dioxide concentration display window	The figure shows the internal carbon dioxide concentration. [Initial value: 1500ppm] You can set the value by touching the figure. If the setting value is exceeded, the automatic ventilation system will operate.
D Oxygen concentration display window	The figure shows the oxygen concentration inside the chamber. [Initial value: 20%] You can set the value by touching the figure. If a high oxygen concentration is required, it is recommended to set a high carbon dioxide concentration.
D Infrared lamp button	IR Infrared lamp operation switch. (Orange: On/ Gray: Off)
O Indoor lamp button	LED Indoor light operation switch. (Orange: On/ Gray: Off)
ID UV Lamp button	UV-C Lamp operation switch. (Orange: On/ Gray: Off) It can kill parasitic bacteria inside the ventilator.
O Ventilator button	Ventilator operation switch. (Orange: On / Gray: Off) The ventilator operates optimally according to the setting environment inside the chamber.
III Timer setting button	Timer operation switch. (Orange: On / Gray: Off) This is a function to notify with an alarm at set time.

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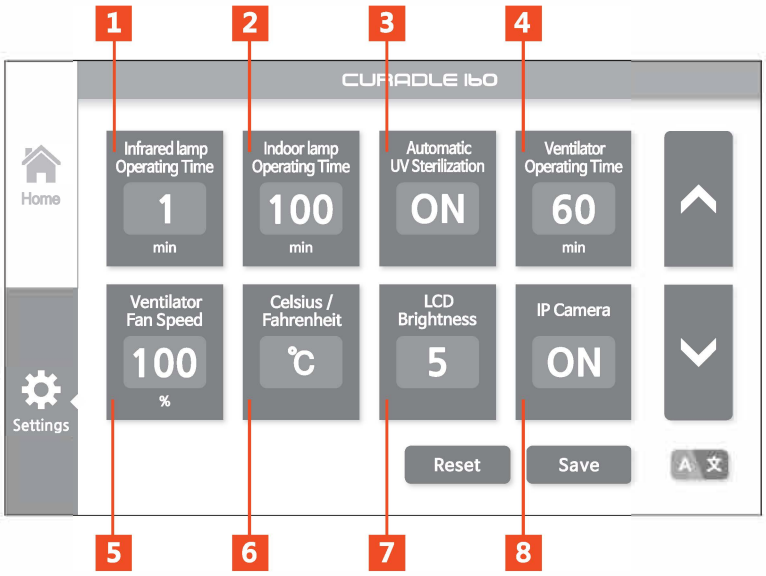
- **Name and function of setting screen**



Select Settings in the left tab of the screen

D Infrared lamp operating time setting button	You can set the operating time of the IR infrared lamp [Initial value: 1 minute] After the set time, the lamp turns off automatically.
fl Indoor lamp operating time setting button	You can set the operating time of the LED indoor lamp. [Initial value: 100 minutes] After the set time, the lamp turns off automatically.
D Automatic UV sterilization function setting button	You can activate the UVC function automatically [Initial value: On] It can kill parasitic bacteria inside the ventilator. If it is turned on, the sterilization function is automatically turned on and off at a certain time and is repeated.
D Ventilator operating time setting button	You can set the operating time of the ventilator fan. [Initial value: 60 minutes] After the set time, the ventilator automatically turns off and is turned on and off automatically according to the chamber environment.
1:1 Ventilator fan speed setting button	You can set the speed of the fan that operates when the ventilator fan is turned on. [Initial value: 100%] For animals that are sensitive to noise, you can set the speed of the ventilator fan to a lower level.
g Celsius/ Fahrenheit setting button	You can change the display unit of temperature. [Initial value: ℃]
E LCD brightness control button	You can adjust the brightness of the LCD screen. [Initial value: 5]
lll IP Camera setting button	You can set on and off of the IP camera function. [Initial value: Off]
*** Up and down arrow buttons**	Increase (up) / Decrease (down) Used to increase or decrease the setting value of each function.
*** Reset button**	Used to reset the entire function of the setting screen to the status when released from the factory.
*** Save button**	Used to save the setting value of each function.
*** Display language setting button**	You can change the display language to one of many languages. [Initial value: English]

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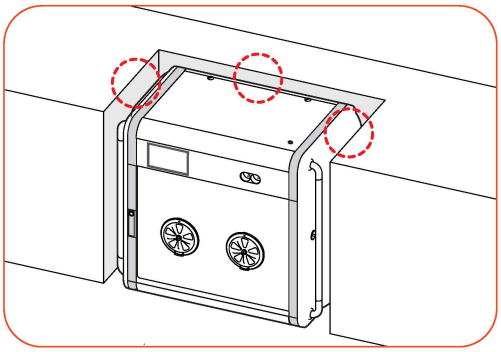
• Installation environment

**CURADLE is designed and calibrated to the latest digital control device for user's convenience, but please observe the following. Failure to do so may have a fatal effect on the animal.
The installation environment has a lot of influence on the internal environment of the device, so it is recommended to locate the CURADLE in a place with low noise and vibration. It is recommended to locate in a place where the temperature difference is not too severe, within ambient temperatures of 20 ~25 ℃ (68 ~77 ℉) and humidity 40 ~60. Room temperatures can often drop severely at night, so be sure to check this. During the day, the product should be located away from direct sunlight.**

• Installation method

⚠ **Run the device sufficiently first, checking all functions are working correctly, before introducing the animal. If the location of the product is not within the recommended external conditions [temperature: 20 ~25 ℃ (68 ~77 ℉) / humidity: 40 ~60%] CURADLE may not reach or maintain set environmental conditions.**

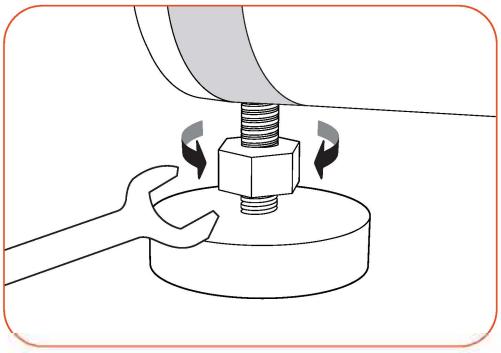
Tip : If you want to attach the machine to the wall, please insert the power cord into the power input socket on the back and raise the short circuit breaker switch and then proceed with the installation without connecting the power. Be sure to connect the power after completing the installation.



► Place the device horizontally on a sturdy, level surface.

► Keep the space between the machine and the wall at least 5 cm to avoid blocking the ventilation openings. (You may need to widen the side gap further depending on the ancillary equipment mounted on the stand pole.)

⚠ **If the floor of the installation site is not horizontal, the door may not close correctly. In this case, you can adjust the height to level by turning the nut of the rubber foot with a wrench as shown in the picture.**



► When the installation is complete, remove the protective film inside the machine.

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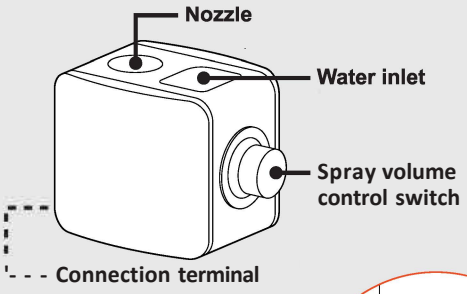
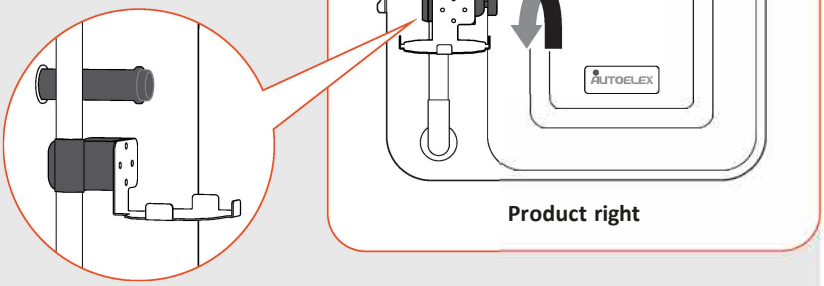
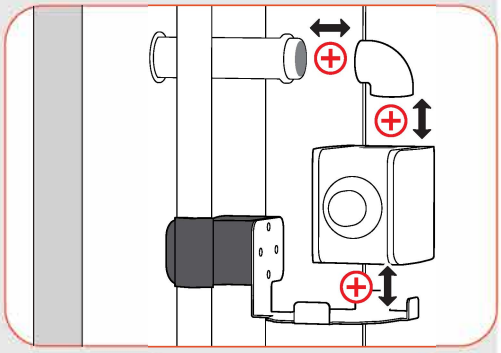
① How to install the humidifier

Tip : The humidifier model provided may be changed without prior notice to improve performance.





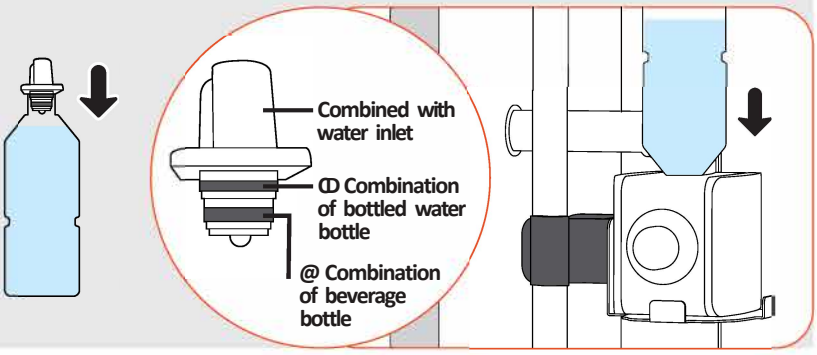
▶ Tighten the humidifier clamp to the bottom of the right stand pole and turn the lever to tighten it firmly.



▶ Place the humidifier on top of the clamp and assemble in the following order:
humidifier connector+ connecting socket + nozzle.
If the assembly is loose, the humidification will not work properly, so fix it firmly.

▶ Adjust the clamp height so that the humidification hose is horizontal.

▶ Put distilled water into the bottle. insert it into the joint part, lock it so that the water does not leak, then insert it back into the water inlet.
(* Combine by pressing without turning it.)
If the connection is loose, water will not be supplied properly, so fix it firmly.



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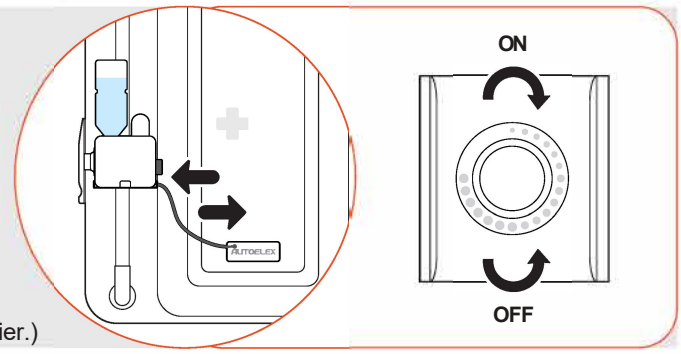
► Insert and connect the power cord of the humidifier into the connection terminal of the humidifier main unit and the machine.

► **Turn spray volume adjustment switch to minimum.**

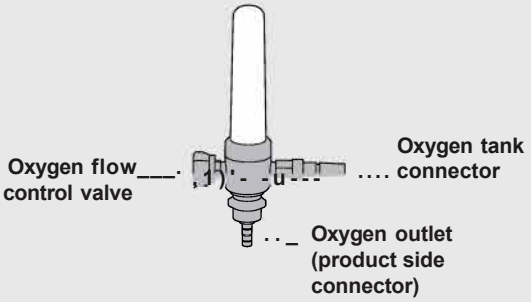
► When using the product, please check the water of the bottled water frequently and fill it. If there is no water, the humidity cannot be controlled to the set level. (If there is no water, the red lamp lights on the humidifier.)



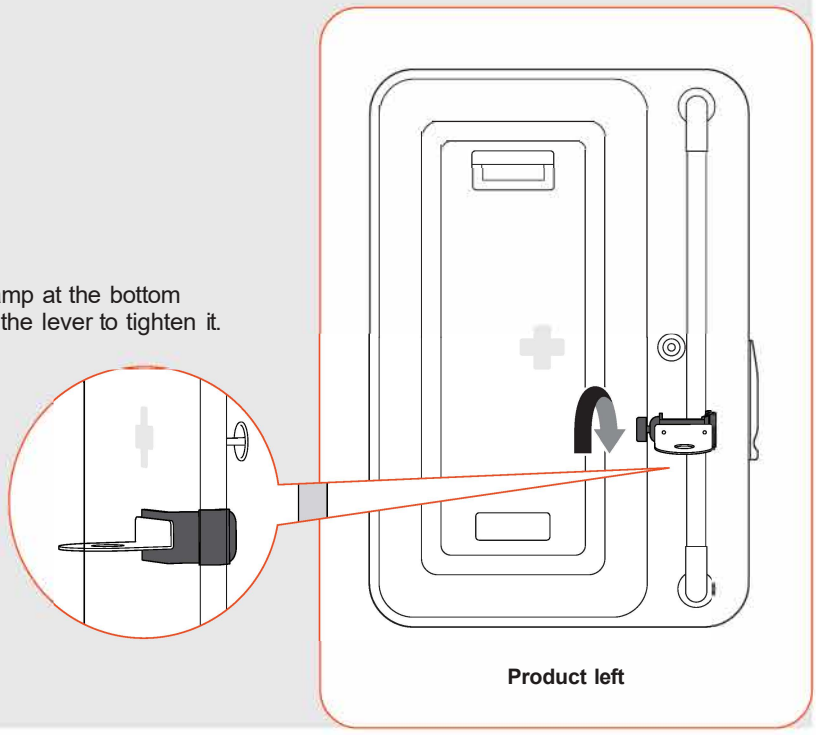
② How to install oxygen regulator, oxygen tank

- Oxygen tanks should be purchased separately.

Tip : The oxygen regulator model provided may be changed without prior notice to improve performance.



► Connect the oxygen regulator clamp at the bottom of the left stand pole and tighten the lever to tighten it.



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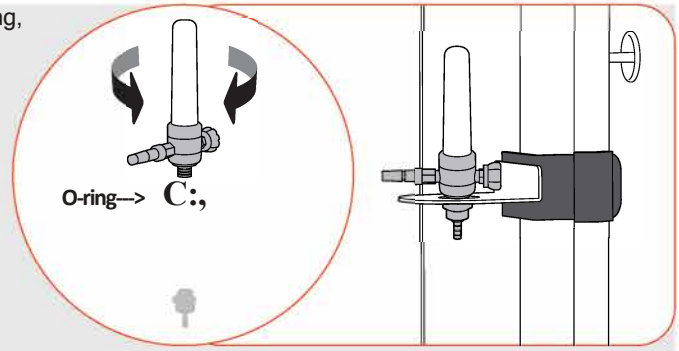
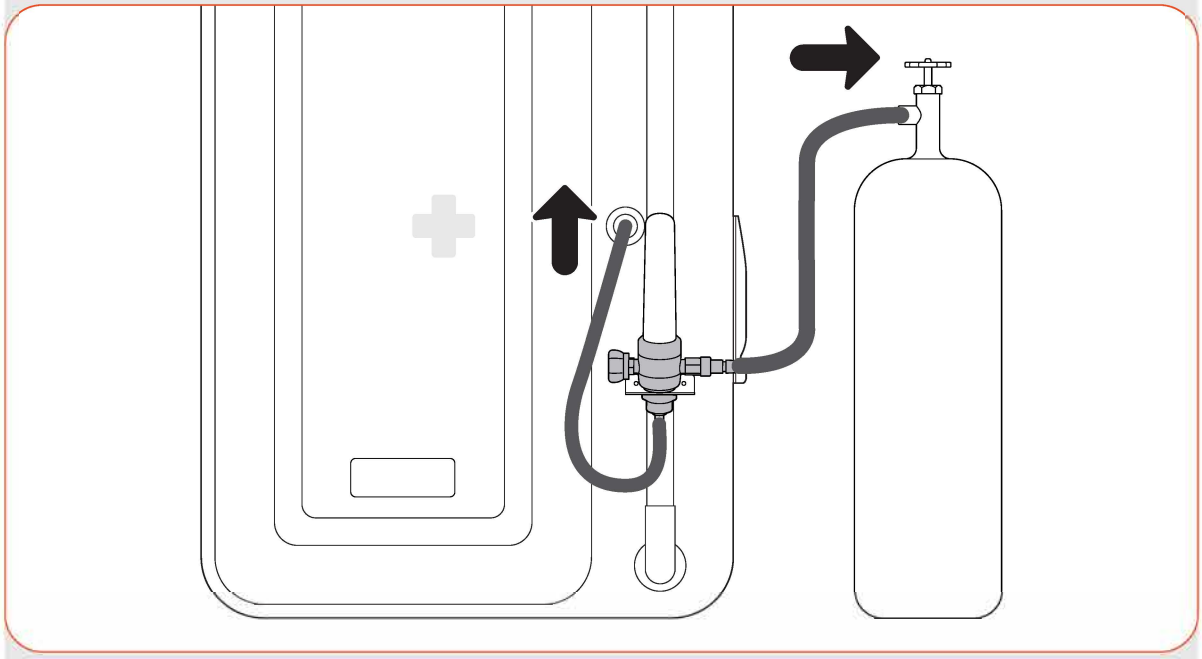
After separating the oxygen regulator by turning, please assemble it onto the clamp as shown. Be sure to insert the rubber 0-ring.

Connect oxygen hose to oxygen outlet and oxygen regulator connector.

Prepare a hose conforming to the specification of the oxygen tank, and connect the oxygen tank connector and the oxygen tank.



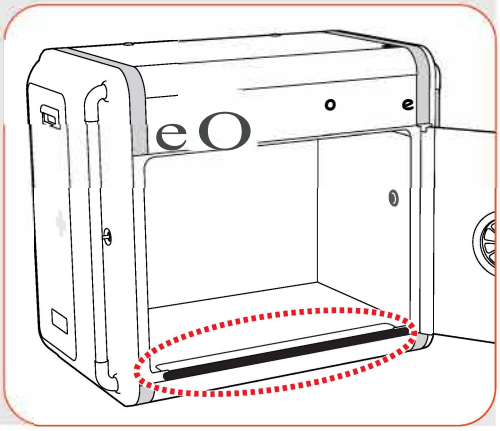
If the hose assembly is loose, oxygen may not be supplied properly, so fix it firmly.



When using, you can adjust the amount of oxygen injected by adjusting the oxygen flow control valve.

Open the door as shown, put the silicone door seal in front of the waste tray and close the door.
(Please fit both ends of the silicon seal and the blue sticker.)

Using of Door Silicone Seal assists in maintaining desired oxygen concentration. However, a power failure or loss of oxygen supply may cause injury or death to animal patients. Please remove the seal when not in use.



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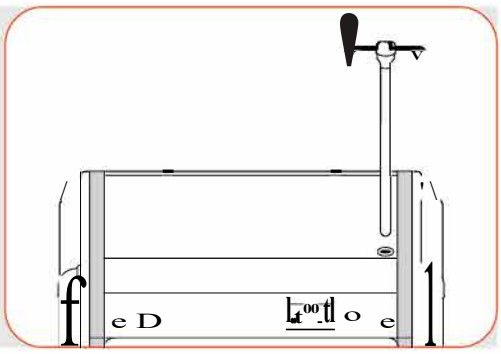
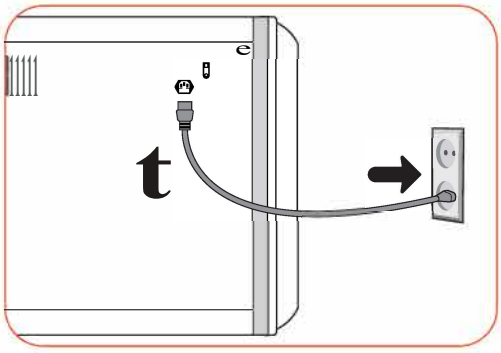
® How to assemble the ring holder

Assemble the ring holder in the upper ring holder hole as shown in the figure.

The ring holder is accessible only to the ***above*** equipment when stacking in 2 stages.



Connect the power cord to the power socket on the back of the machine and plug it into a power outlet.



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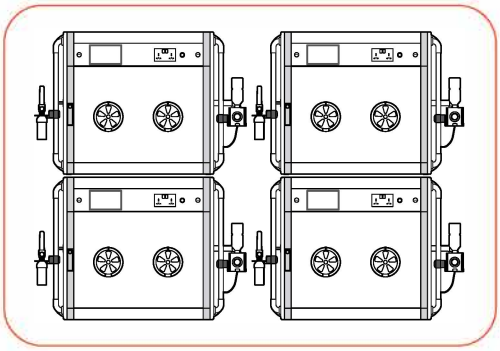
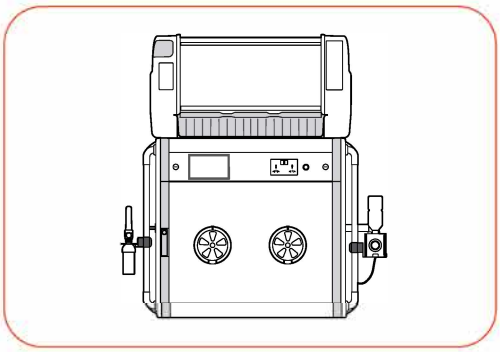
• Machine loading and installation method

⚠ For loading, remove your pet, goods, and auxiliary equipment and then turn off the power.
It is recommended that two or more adults should load it together because the weight may cause damage or injury to the machine when the product is moved.



► Keep the space between the product and the wall more than 5cm and the space between the product and the product more than 15cm.

► With the door and hand access window closed, two people grab both handles and a stand pole and load the machine carefully. Place the machines side by side, vertically and horizontally.



► When loading in 2 stages, the ring holder and wheels (sold separately) are applicable only to the machine above and machine below, respectively.

► This product and CURADLE PET BROODER can be used together by loading them up and down.
Information on CURADLE PET BROODER can be found on the homepage. (www.curadle.com)

& Do not load CURADLE 160 in more than 2 stages.

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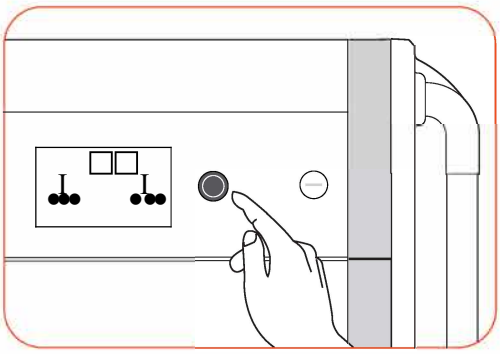
• How to start the machine

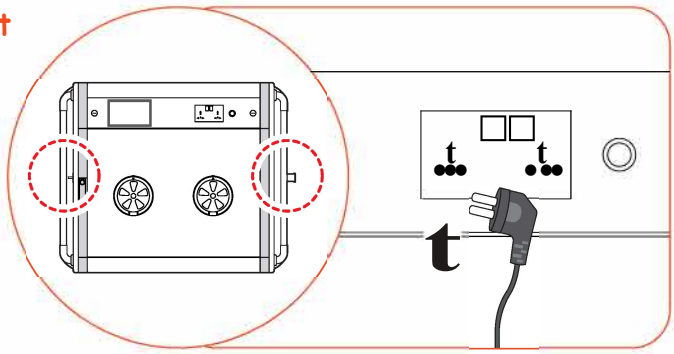


After connecting power is on, press the power button after raising the short circuit breaker switch, and the LCD screen will turn on and operate at the Initial value setting.

The current temperature, humidity, oxygen and carbon dioxide concentrations appear on the home screen and are stabilized to optimal conditions after 1 to 2 hours of operation.

Tip: The artificial intelligence function controls internal figures, which can cause the figures to rise very slowly in some areas.

• How to use stand pole & external outlet

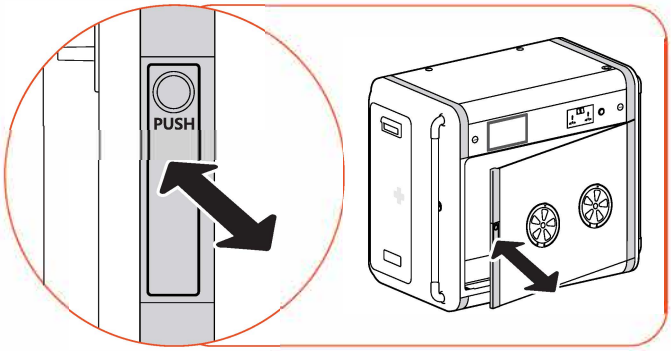


You can install auxiliary equipment using both stand poles.

You can supply power to auxiliary equipment with two outlets on the front.

⚠ When using ancillary equipment, a combined power consumption of 1000W or more is prohibited. Excessive use may result in fire.
(e.g. one 800w heater+ one 400w pump = 1200w is not advisable)

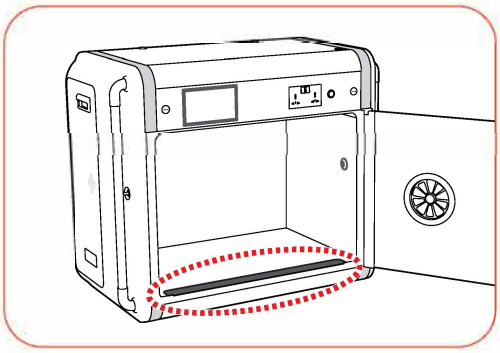
• How to use the door lock



Pressing the door lock releases the lock and opens the door.

When closing the door, it automatically locks when you close the entire door.

• How to use the waste tray



It is designed to collect in the waste tray when your pet urinates inside. (Possible if the rear is slightly higher)

Put a sanitary pad on the floor of the chamber.
(Sanitary pads sold separately)

It is recommended to clean frequently for hygiene reasons.
[see How to clean on 26 p]

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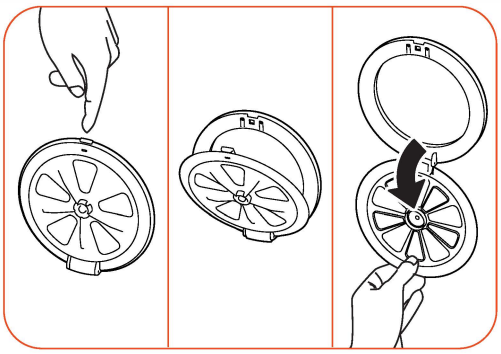
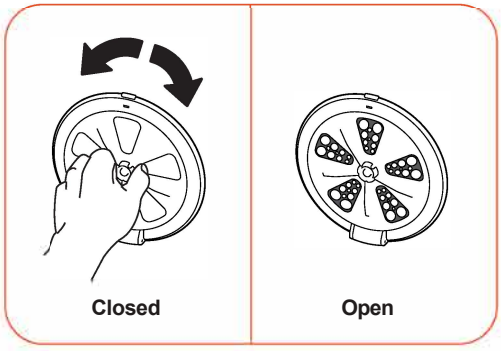
• How to use the hand access window

For treatment, you can place your hand inside the hand access window without opening the door.

If you push down the lock on the hand access window as shown in the figure, the hand access window opens slightly. Open the whole with your hand.



Hold the center of the hand access window and rotate it to the left or right to open part of it. This can be used as a manual vent.



Tip: If the internal humidity is high or a condensation phenomenon occurs, adjust the hand access window to ventilate.

⚠ Do not leave the hand access window open except treatment. Small animals may come out of the machine This may be dangerous, especially in a two-stage load.

• How to use IP camera

The IP camera is included in the PX-ICU160C model. You can refer to how to use in the separate manual.

• Dew Condensation

It is a natural phenomenon that occurs when there is a large difference between the temperature inside and outside the body during operation of the machine, and water droplets may form or flow down on the inner wall of the chamber and the window. It may be more severe especially when the pet is inside or the temperature is high. To reduce the condensation phenomenon, install the machine at a place where the temperature difference between the inside and the outside of the machine is not large, and set the humidity low.

You can reduce the Dew Condensation by adjusting the hand access window for ventilation.

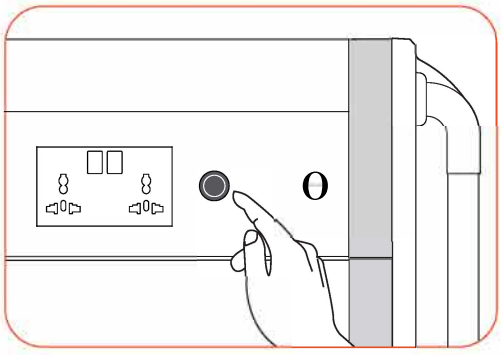
Please press the ventilator button to operate. [See function setting on 20P]

• How to turn off the machine

You can turn the machine on and off by pressing the power button.

You do not need to reset it after use. If you want to set the same as the previous usage conditions, you just need to connect the power source again.

If you set the temperature and humidity functions to off, you can use the machine with minimum power consumption.



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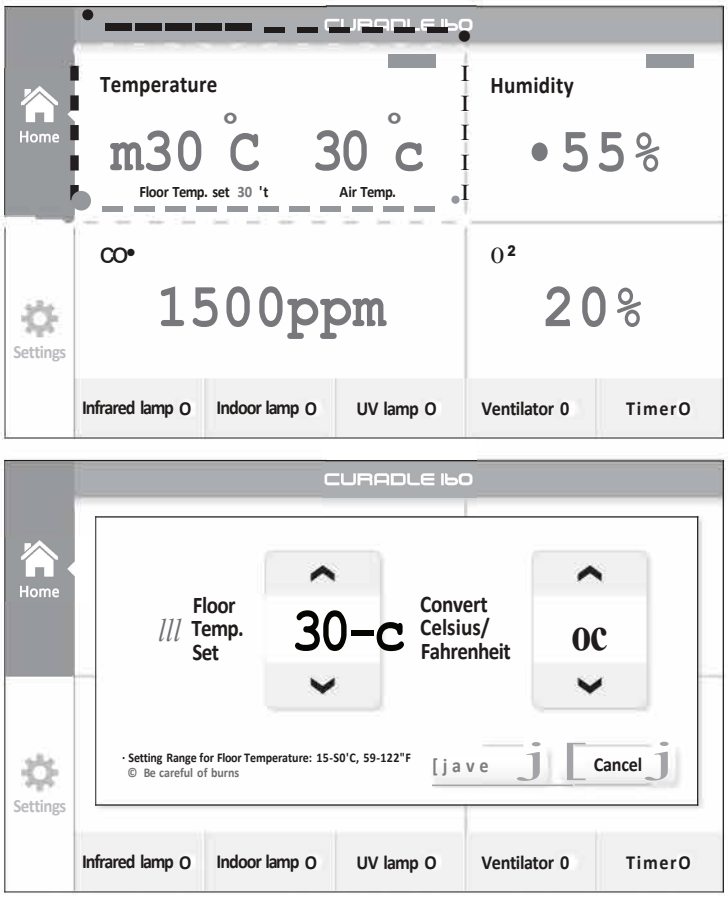
- **How to set the floor temperature from the home screen, Celsius/Fahrenheit**



► If you touch the floor temperature value on the home screen, a popup window allowing you to change the floor temperature setting and Celsius/ Fahrenheit will appear.

► In the floor temperature setting, you can set the desired temperature by using the up and down arrow buttons. [Initial value: 30'C] [Setting range: 15 - 50'C(59 - 122'F), Adjustable in 1 ° C (1 ° F) increments]

⚠ The floor temperature may not fall below the setting value depending on the ambient temperature of the machine and the size of the animal housed in the chamber. However, if the floor temperature is too cold, hypothermia may cause death of the animal, so careful observation is required.
Changing the temperature setting from 'high to low' or 'low to high' may cause problems with the temperature control, so when changing, set the temperature setting to OFF and wait for more than 30 minutes.
If the floor temperature gets close to room temperature, change it to ON and set the desired temperature.

► In Celsius/ Fahrenheit change, you can set the desired unit by using the up and down arrow buttons. [Initial value: 'C] [Setting range: 'C <> 'F]

►After setting the desired value, press the Save button to save the setting value, and press the Cancel button to return to the home screen without saving the setting value.

⚠ If the internal temperature is abnormally higher than the setting value and there is a problem with the temperature, humidity sensor, a message will be displayed along with a warning alarm.

EI : You can turn temperature operation on and off

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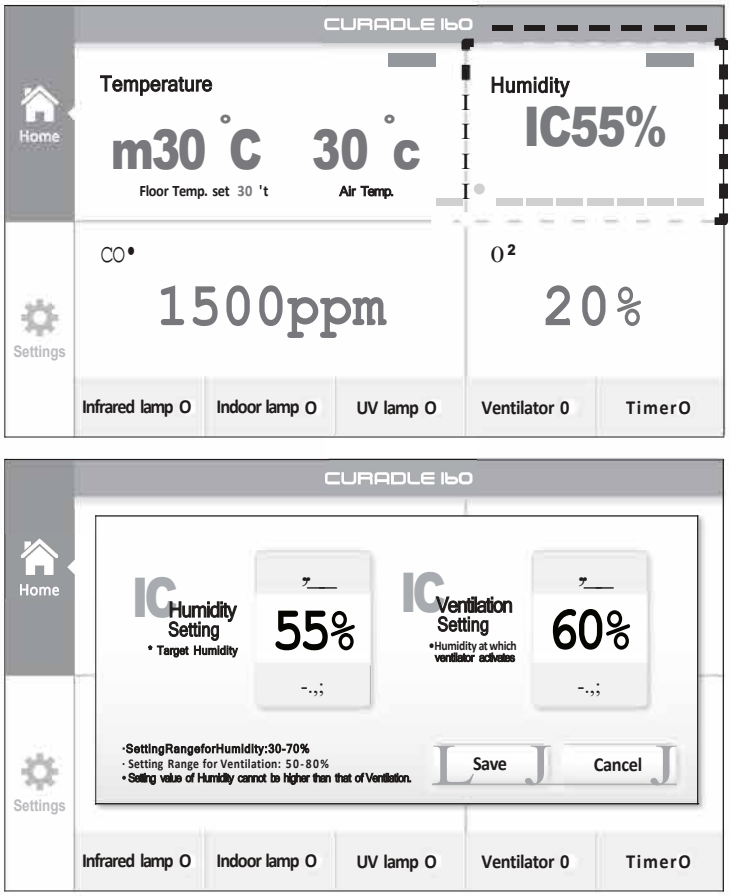
- **How to set humidification(ventilation target humidity), ventilation(ventilator operation humidity) on home screen**



► If you touch a humidity value on the home screen, a pop-up window allowing you to change the humidification setting and ventilation setting will appear.

► In the humidification setting, you can set the desired humidity using the up and down arrow buttons.
[Initial value: 55%] [Setting range: 30 - 70%, Adjustable in 1% increments]

✻ The ventilation setting function is a function to discharge the air inside the chamber to minimize the occurrence of condensation due to high humidity and to maintain a comfortable indoor environment. It automatically ventilates when the humidity exceeds the setting range (ventilation setting value).
The ventilation setting value is automatically set higher than the humidification setting value, and this setting value can be changed by the user. The ventilation setting value is automatically set to 5% higher than the humidification setting value.

► In the ventilation setting, you can set the desired humidity when the ventilator is operating by using the up and down arrow buttons.
[Initial value: 60%] [Setting range: 50 - 80%, Adjustable in 1% increments]

► After setting the desired value, press the Save button to save the setting value, and press the Cancel button to return to the home screen without saving the setting value.

EI : You can turn the humidity operation on and off

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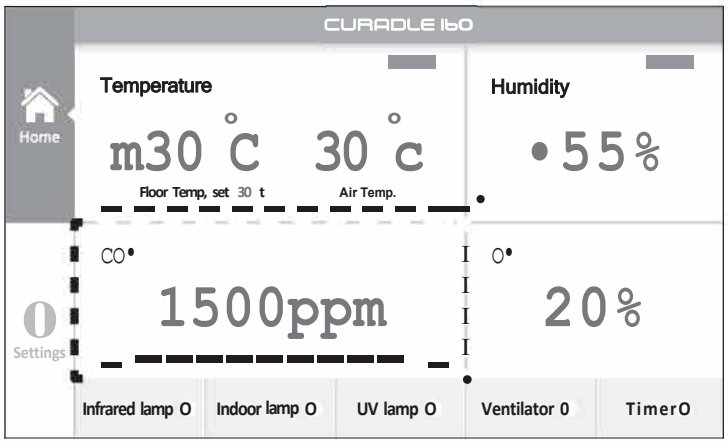
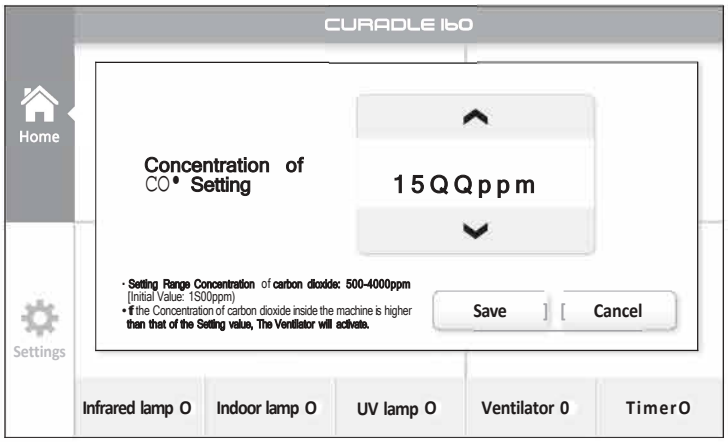
4. Function setting

(1) How to set the functions on the home screen

- **How to set the CO2 concentration on the Home screen**





* Carbon dioxide concentration setting function is to prevent safety accidents of animal patients such as dizziness, discomfort, shock, etc. by high concentration of CO2 in enclosed space inside the chamber and allows polluted air to be discharged to the outside.

When you touch the CO 2 concentration value on the home screen, a pop-up window to change the concentration will appear.

In the carbon dioxide concentration setting, you can set the concentration by using the up and down arrow buttons.
[Initial value: 1500ppm] [Setting range: 500 - 4000ppm, Adjustable in 100ppm increments]

After setting the desired value, press the Save button to save the setting value, and press the Cancel button to return to the home screen without saving the setting value.

⚠ If the internal CO2 concentration is abnormally higher than the setting value, a message will appear on the screen with a warning alarm. If the alarm rings, do not put the animal patient in before you solve the problem.

,&. Installation in a non-ventilated room may cause the internal CO2 concentration to increase.
If the place is ventilated, the concentration will return to normalcy.

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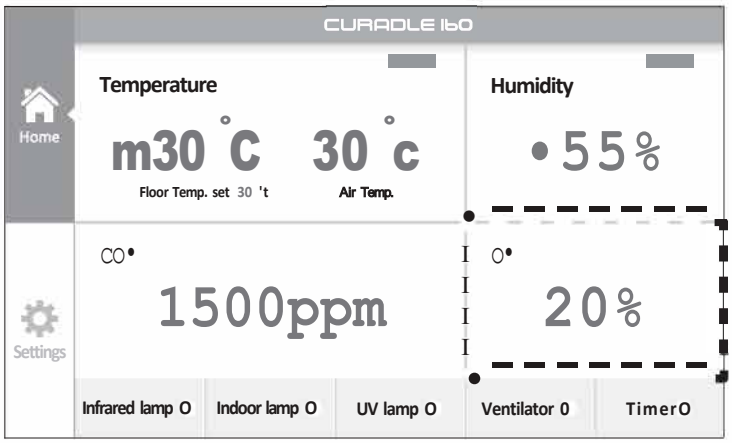
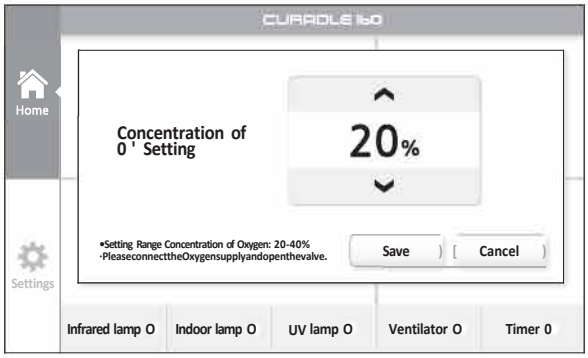
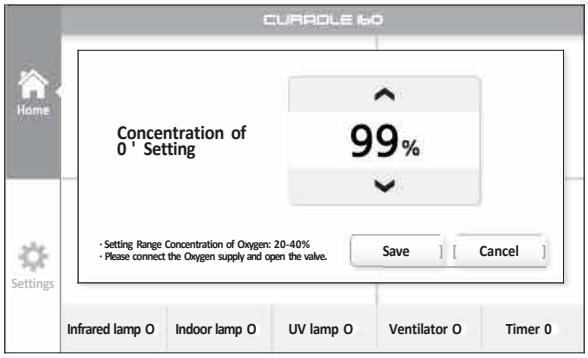
- **How to set the 02 concentration on the Home screen**





How to turn off oxygen function normally



Manual setting method of oxygen function (always ON)

* The oxygen concentration setting function is to increase the oxygen concentration inside the chamber up to a certain level and to help the animal patient to recover quickly. It maintains the concentration automatically at the desired setting value only when the oxygen supply is connected. You must close all hand access windows to maintain oxygen concentration above 30%. In particular, there is a risk of fire and explosion at high oxygen concentrations, so keep away from sources of ignition such as fire or electric sparks.

► When you touch the oxygen concentration value on the home screen, a pop-up window allowing you to change the concentration will appear.

► In the oxygen concentration setting, you can change it to the desired value by using the up and down arrow buttons. [Initial value: 20%] [Setting range: 20 ~ 40%, 99%, Adjustable in 1% increments]
*If you do not want oxygen supply, set the oxygen concentration to 20%.
When set to 99%, oxygen is continuously supplied. The oxygen concentration 21 ~ 40% setting is automatically controlled to the corresponding value.

* Although the oxygen concentration in the chamber is automatically controlled by the oxygen sensor, if there is a problem with the oxygen sensor function due to a failure of the oxygen sensor or improper replacement cycle, the oxygen can be fed manually. If the oxygen concentration setting is set to 99%, the oxygen valve will always open. At this time, the machine does not automatically control, so the user must manually adjust the oxygen tank valve to the concentration through careful observation. This function can be used for a short time as a first aid measure, but it is not recommended.

► After setting the desired value, press the Save button to save the setting value, and press the Cancel button to return to the home screen without saving the setting value.

,&. If there is a problem with the oxygen sensor, a message will appear on the screen with a warning alarm.

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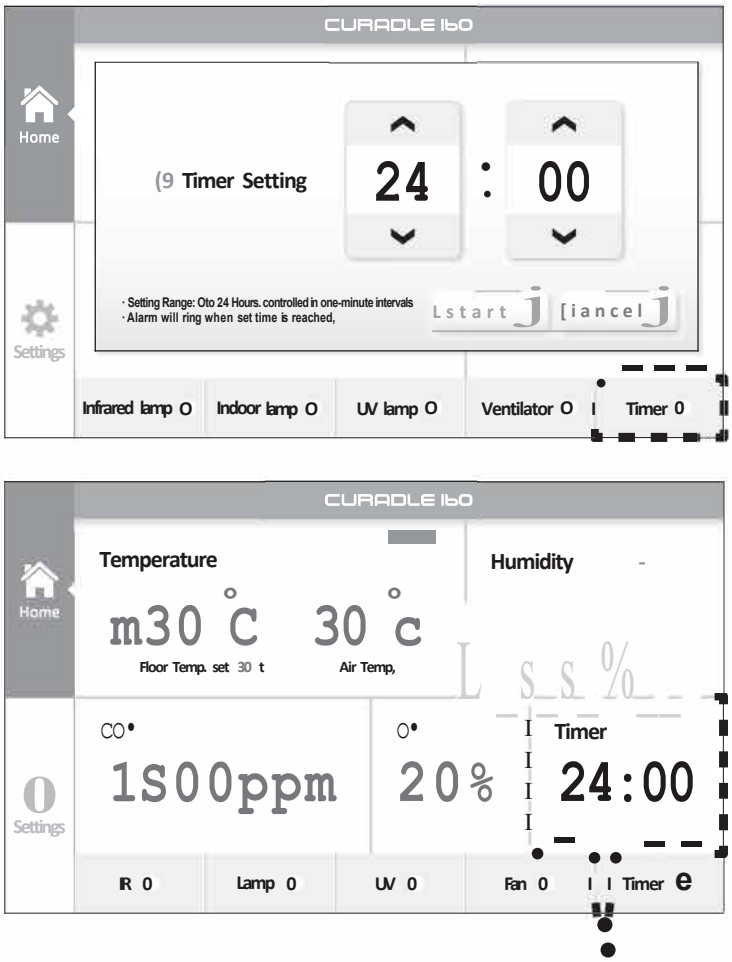
- **How to set the timer on the Home screen**



The remaining time is displayed on the Home screen.

The timer setting function is to ring the alarm for the user when the set time is reached so that the patient can be treated smoothly.

If you press the timer button, a popup window allowing you to set the elapsed time until the alarm rings will appear. [Initial value: 00:00]

You can set hour and minute by using the up and down arrow buttons.
[Setting range: 0 ~ 24 hours, Adjustable in 1 minute increment]

After setting the desired time, press the start button and the timer function will start and the remaining time will be displayed on the home screen.
The alarm will sound if the set time is reached.
If you press Cancel on the timer setting screen, the setting value is not saved and you go back to the home screen.

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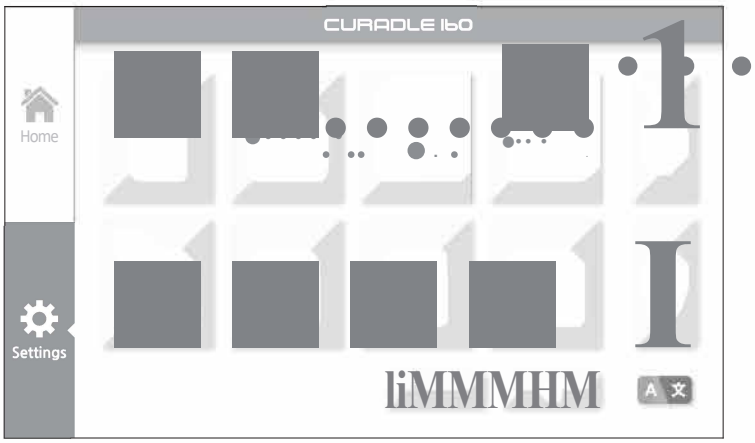
• How to set the function of the setting screen



• How to set the operating time of IR (infrared) lamp

* This function raises body temperature quickly by penetrating deep into the skin tissue, beneficial to the organism to activate kinetic energy. In addition, radiant heat causes blood vessels to expand and promote blood circulation. However, when exposed to the wrong way, it may cause burns depending on the animal, so use according to veterinary instructions.

► If you set the operating time of the infrared lamp on the setting screen, the IR {Infrared) lamp will turn on in one-minute intervals and turn off automatically.
[Initial value: 1 minute]

► You can set the desired time.by using the up and down arrow buttons.
[Setting range: 1 ~ 5 minutes, Adjustable in 1 minute increments]

► After setting the desired time, press the Save button to go to the home screen after saving.

• How to set LED indoor lamp operating time

► If you set the indoor lamp operating time in the setting screen, the LED indoor lamp will turn on automatically in one-minute intervals and then turn off automatically
[Initial value: 100 minutes]

► You can set the desired time.by using the up and down arrow buttons.
[Setting range: 5 ~ 100 minutes, 999 minutes, Adjustable in 5 minute increments]
*If set to 999 minutes, the LED indoor lamp is always on regardless of time

► After setting the desired time, press the Save button to go to the home screen after saving.

• How to automatic UV-C sterilization function setting

* This is a function that **automatically activates the UV-C lamp for 5 minutes every 30 minutes** to effectively kill parasitic bacteria inside the ventilation system. It only activates when the user set it to ON (AUTO mode).

► Select the automatic UV sterilization function button on the setting screen. [Initial value: ON]

► You can set the function on and off by using the up and down arrow buttons.

► After setting the desired time, press the Save button to go to the home screen after saving.

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• How to set the ventilator operating time

* This is a function to set how long the ventilator will be operated when the air inside the chamber is forced out by the user.

► Select the ventilator operating time button on the setting screen. [Initial value: 60 minutes]

► You can set the desired time.by using the up and down arrow buttons.
[Setting range: 5 ~ 600 minutes, Adjustable in 5 minute increments]

► After setting the desired time, press the Save button to go to the home screen after saving.

• How to set ventilator fan speed

* This is a function that adjusts the speed of the ventilator BLOC fan to control the flow of the air circulation and reduce the speed of the fan to enable quiet operation.

► Select the ventilation fan speed button on the setting screen. [Initial value: 100%]

► You can set the desired speed by using the up and down arrow buttons.
[Setting range: 40 ~ 100%, Adjustable in 10% increments]

► After setting the desired speed, press the Save button to go to the home screen after saving.

• How to set Celsius/ Fahrenheit

* Celsius/ Fahrenheit can be also changed on the Home screen.

► Select the Celsius/ Fahrenheit button on the setting screen. [Initial value: ℃]

► You can set the desired unit by using the up and down arrow buttons.
[Setting range: ℃ ..... ℉]

► After setting the desired unit, press the Save button to go to the home screen after saving.

• How to set the screen brightness

► Select the Screen Brightness button on the setting screen. [Initial value: 5]

► You can set the desired brightness by using the up and down arrow buttons.
[Setting range: Steps 1 to 5, Adjustable by one step]

► After setting the desired brightness, press the Save button to go to the home screen after saving.

• How to set IP camera

* For details on how to use the product, please refer to the separate instruction manual for the IP camera, enclosed with the product.

► Select the IP camera button on the setting screen. [Initial value: Off]

► You can set on and off by using the up and down arrow buttons.

► After setting the desired value, press the Save button to go to the home screen after saving.

• How to set the display language

► Select the display language button on the setting screen [Initial value: English]

► You can set the desired language by using the up and down arrow buttons
[English, German, Spanish, Portuguese, Russian, Korean, Chinese, Japanese, Arabic]

► After setting the desired language, press the Save button to go to the home screen after saving.

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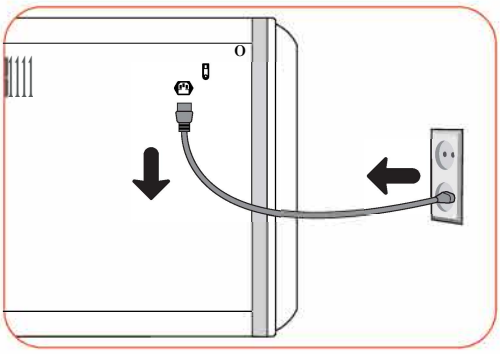
5. How to clean and replace consumables

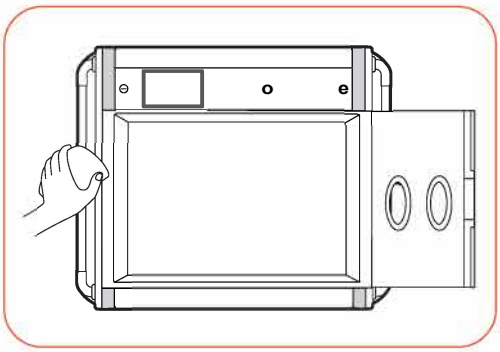
• How to remove and clean

⚠ Do not spray water or cleaning liquid directly on the machine during cleaning.
Direct spraying may cause malfunction of the machine. It may also cause fatal defects of the sensor, so please wipe it with cloth moistened with water or cleaning liquid. In particular, be careful not to let water or disinfecting fluid enter the oxygen sensor hole inside the chamber. It may cause the oxygen sensor to malfunction.



► Press the power button to turn off the power and disconnect the power cord from the outlet.

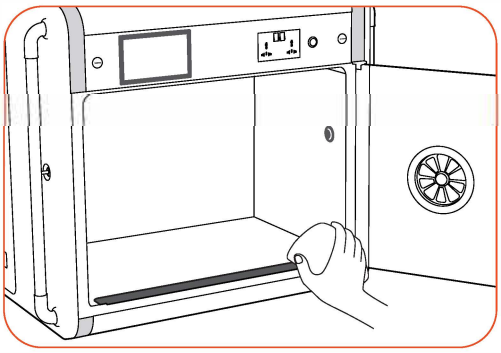
A Be sure to remove the power cord of the machine from the power outlet.



►After removing the pet, supplies, and accessories, wipe the exterior with a soft cloth moistened with disinfecting alcohol.

⚠ Do not wipe the product with benzene, thinner or other organic solvents.
It may cause deformation and discoloration.

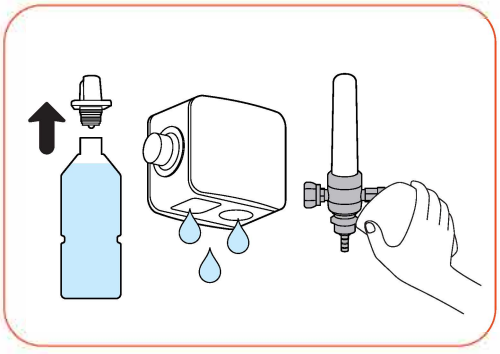
• How to clean the waste tray



► If the urine tray is filled with urine, remove it with a tissue or sponge that has good absorbency, then wipe it with soft gauze moistened with disinfecting alcohol.

A Please clean it daily for hygienic use.

• How to clean humidifier, oxygen regulator

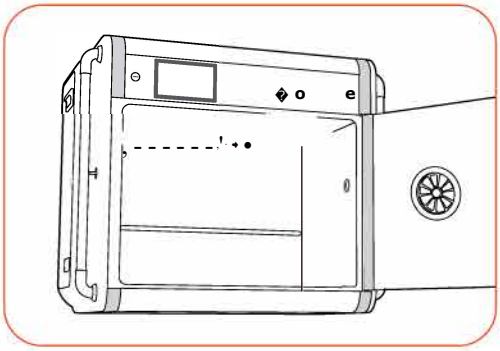


► Separate the power cord and bottled water bottle from the humidifier and empty the water in the humidifier main body. Hold the humidifier upside down and completely remove any water remaining inside. At this time, please be careful not to let water enter the vents on the back and at the bottom of the humidifier. Wipe it with the soft cloth moistened with water and let it dry completely.

► Wipe the oxygen regulator with soft lint free cloth moistened with water, and then dry it completely.

5. How to clean and replace consumables

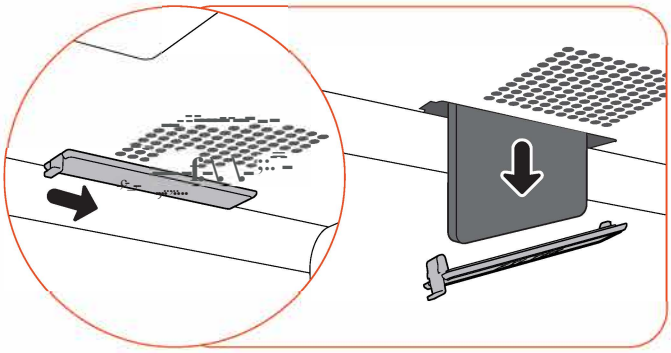
• How to clean and replace the air filter



,&. Air filter cleaning cycle:
It is recommended that the air filter should be cleaned once a month and replaced every six months.
(May vary depending on machine use time)

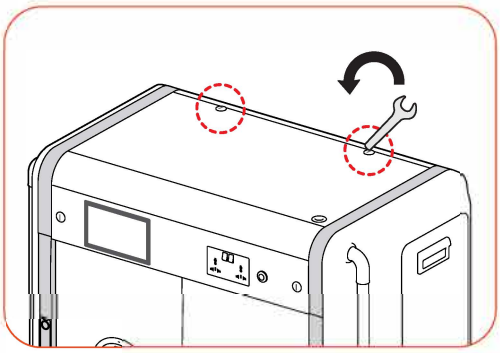
► You can replace the air filter from the upper of the chamber inside.

► You can take out the air filter when you separate the cover marked in 'FILTER' letter as shown in the picture.
Clean the separated air filter thoroughly with water, dry completely, then insert again.



► When replacement is complete, reassemble in the reverse order of removal.

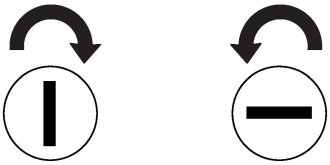
• Preparation before replacing IR{Infrared) lamp, LED indoor lamp, carbon dioxide sensor (Unlock the upper surface maintenance part)

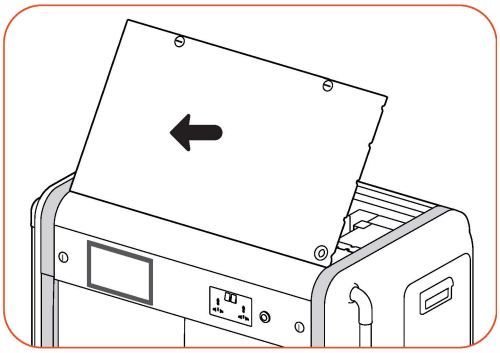


► Press the power button to turn off the power and disconnect the power cord from the outlet.

,&. Be sure to disconnect the power cord of the machine from the power outlet.

► Turn both locking levers on the top side of the machine by 90 degrees using the rear side of the wrench included in the product. The maintenance part is unlocked.





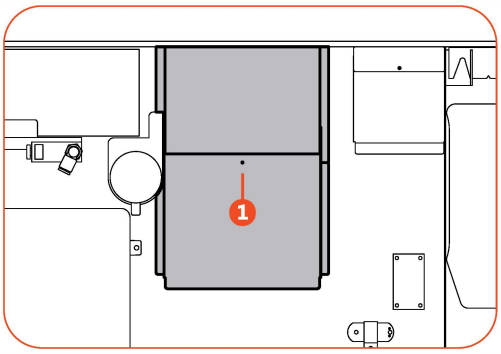
► You can grab the locking lever and lift the top cover to remove it and replace the consumables.

► When replacement is complete, reassemble in the reverse order of removal.

5. How to clean and replace consumables

• How to replace IR(Infrared) lamp, LED indoor lamp

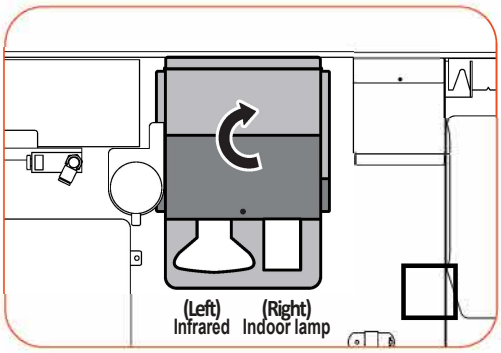
Loosen one screw in the lamp unit in the upper center, in the part shown in the figure using the driver when you look at the maintenance part from the top.



Lift up the detached cover.
The red lamp is an IR (infrared) lamp and the white lamp next to it is the LED indoor lamp.

Turn the lamp counterclockwise to remove it.
Turn the new lamp clockwise to assemble it.

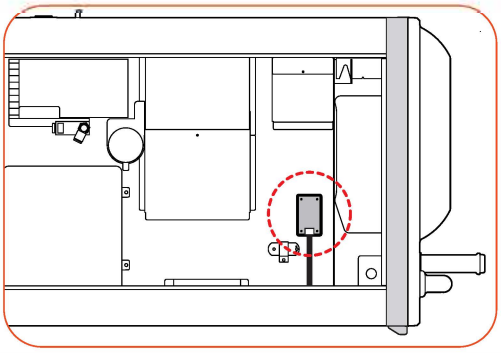
When replacement is complete, reassemble in the reverse order of removal.



• How to replace the carbon dioxide sensor

* The carbon dioxide sensor is a consumable and its life span is around one year. Replacement is required every year after purchase to maintain the accuracy of the sensor.
To use the verified sensor, please purchase from place where you purchased the product.

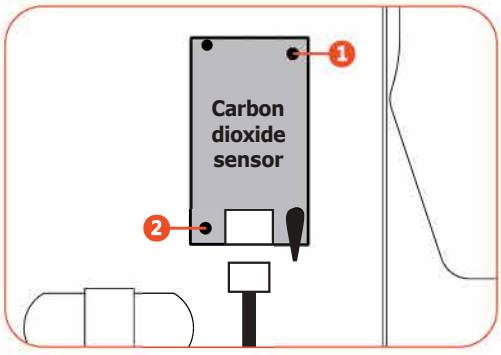
The carbon dioxide sensor is located at the lower right corner, as shown in the figure when you look at the maintenance part from the top.



Loosen the two nuts on the edge of the carbon dioxide sensor and remove the connector.

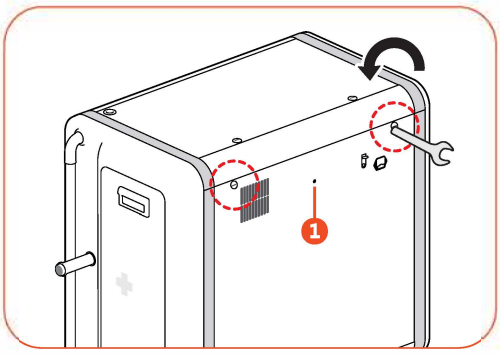
A Handle it carefully to prevent sensor failure.

Replace it with a new sensor and reassemble in the reverse order of removal.



5. How to clean and replace consumables

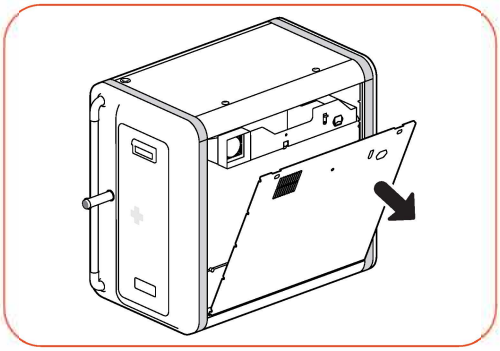
• How to replace the oxygen sensor



* The oxygen sensor is a consumable and its life span is about one year. Replacement is required every year after purchase to maintain the accuracy of the sensor.
To use the verified sensor, please purchase from the place where you purchased the product.

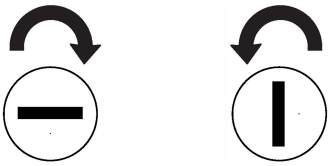
Press the power button to turn off the power and disconnect the power cord from the outlet.

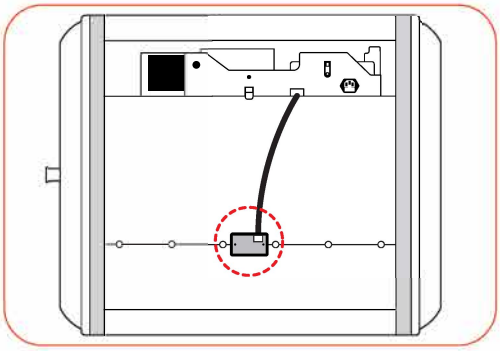
& Be sure to disconnect the power cord of the machine from the power outlet.



In case of oxygen sensor replacement, disassembly of the rear maintenance part is required.
Use a screwdriver to loosen one screw on the top center of the back as shown in the figure.

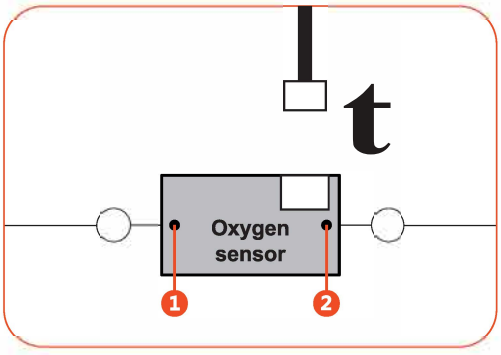
Turn both locking levers on the back of the machine by 90 degrees using the rear side of the wrench included in the product. The maintenance part is unlocked.





Pull the locking lever to remove the back cover.

The oxygen sensor is located at the bottom center.



Loosen the two nuts on the edge of the oxygen sensor and remove the connector.

& Handle it carefully to prevent sensor failure.

Replace it with a new sensor and reassemble in the reverse order of removal.

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• Troubleshooting(FAQs)

This product is produced with strict quality control by precise equipment, but sometimes product defects occur during distribution. If there is a problem, contact Curadle's service center or distributor. We will work to solve the problem quickly. This product is designed in a module manner that can be easily replaced by qualified personnel.

Circumstance	Items to be confirmed	Solutions
No power to the machine	Check that the power cord is plugged in correctly. Check that there is no power failure. Check that the plug is not defective. Check that the short circuit breaker on the back of the machine has not tripped.	Unplug the power cord and plug it back in. Check other electrical and electronic products around you. Move to another outlet to check,
Temperature is too high/ Temperature is too low	Check the set temperature. Check that the ventilation fan does not turn. Check that it is not exposed to direct sunlight.	Set the set temperature to the desired temperature. Unplug the power plug from the outlet, turn off the power, and clean the ventilation fan with a brush. Press the Reset button on the setting screen to reset the entire function.
Humidity is too high/ Humidity is too low	Check that there is enough water in the humidifier bucket. <When low> Check that the door and hand access window are closed properly. <When high> Check the environment in which the machine is installed. Check that there is water inside the machine.	Replenish enough water in the humidifier bucket. <When low> Check that there are no foreign objects in the door and hand access window and close them again. Press the Reset button on the setting screen to reset the entire function. <When high> Set the installation environment. (see pg11) See how to set up humidification and ventilation. (see pg20)
The machine makes some noise. * There is a ventilation fan for air circulation inside the machine, so some noise is generated	Check that there are no objects on the appliance. Check that the floor is vibrating or it is installed on the desk. Check that there is no foreign matter sticking around the ventilation fan. Check that the rubber foot or wheels are the same height.	Remove all put objects. Move the machine to a stable location and install. Unplug the power plug from the outlet, turn off the power, and clean the ventilation fan with a brush. (See how to clean the air filter on pg27) Make the height of the rubber foot or wheels the same. Lower the ventilation fan speed. (See pg25)
When condensation forms on the inside of the machine If kept at high humidity, dew formation may occur.	Check that it is set to high humidity. The condensation phenomenon is a natural phenomenon, not a malfunction.	Set the humidity to 40% or less. Set the installation environment. (See pg11) See how to set up humidification and ventilation. (See pg20)
Trouble closing or locking the door	Check that that the product installation floor is horizontal. Check that that there is a step difference on the floor when you move the product from side to side.	Loosen the nuts of the rubber foot at the bottom of the product by turning them with a spanner little by little until the door is locked properly. Or use a thin sheet of metal to insert the as much as step difference.

⚠ **Check that the device is sufficiently operational and all errors have been solved, before introducing the animal.**

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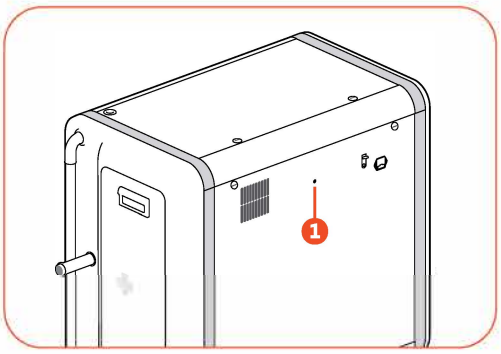
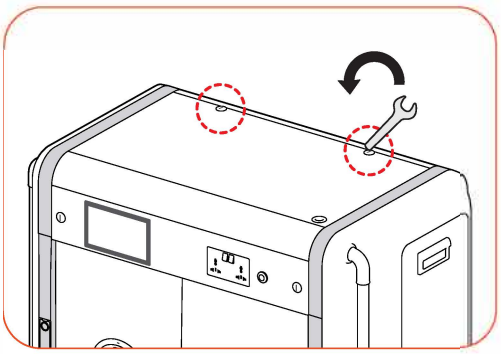
• How to remove and replace the controller part

Tip: In case of after-sales repair, you can remove only the controller unit for quick action, send it to the place of purchase for service. Before sending, you can check the symptom of the machine and receive the service only for the device that has applied for A/S application formally, so please send it by courier after calling the place of purchase and customer service or applying by e-mail.

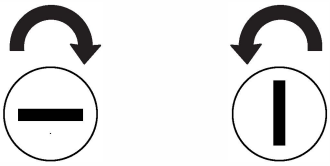


⚠ Move the animal patient to another location and remove the auxiliary device. After disconnecting the power supply, disconnect and replace the controller unit with the power cord disconnected.

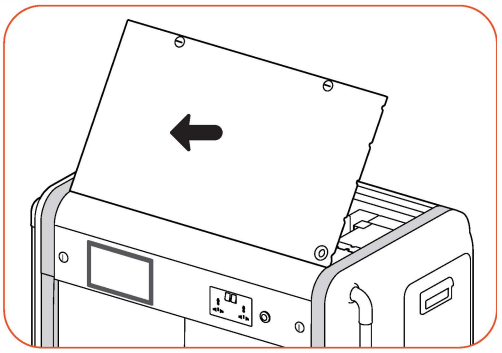
Use the screwdriver to loosen screw O in the center top, the part shown in the figure when you look at the product from behind.



Turn both locking levers on the top of the machine by 90 degrees using the rear side of the wrench included in the product. The maintenance part is unlocked.



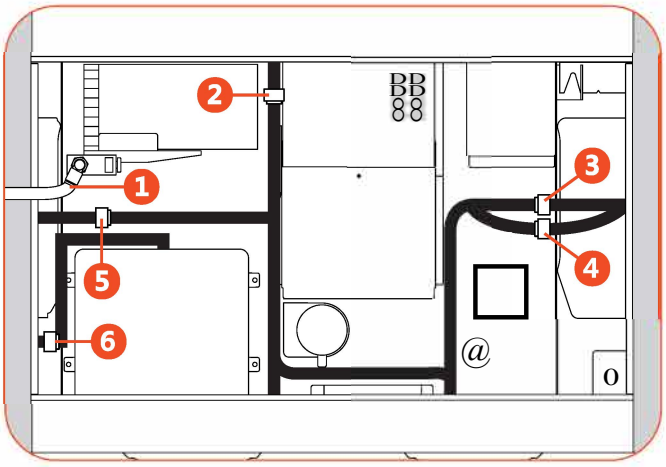
Locked Unlocked



You can grab the locking lever and lift the top cover to remove it and replace the consumables.

You can check the position of each part in the front maintenance part. [Maintenance Part on pg8]

Refer to the figure to remove the six connectors. (The removable parts are tied with a **yellow cable tie.)**



- O Transparent hose
- e White connector
- O Red connector
- O Yellow connector
- O Red connector
- O White connector

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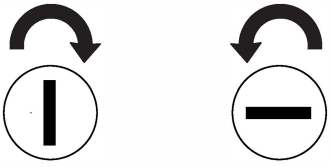
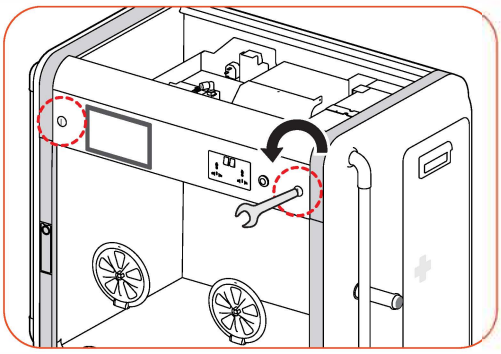
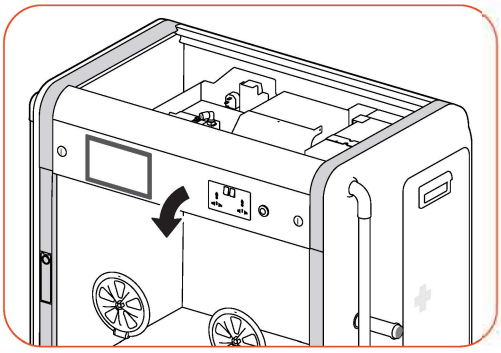
► Turn both locking levers on the front of the machine counterclockwise by 90 degrees using the rear side of the wrench.



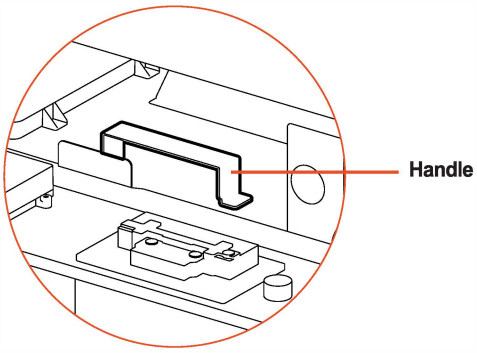


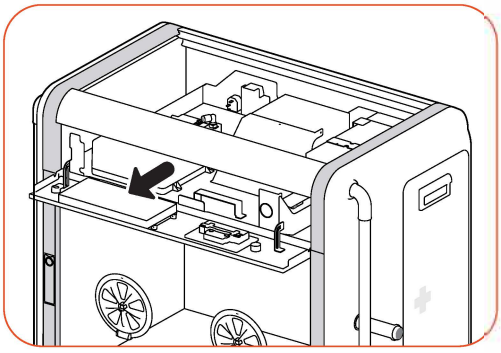
► Hold both locking levers and lower the front panel forward by 90 degrees.

A Work with the door closed.



► Hold the handle of the indicated part and pull it forward (Pull with gloves.)

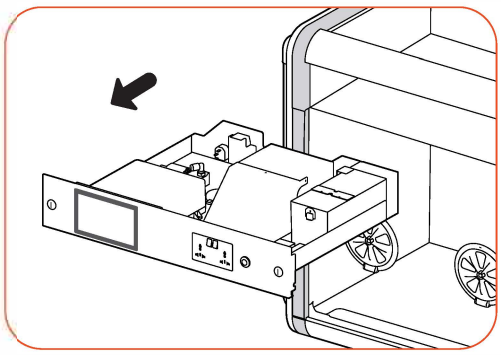




► Controller part is separated.

⚠ **If the controller part is separated well, separate after removing the back cover of the product.**

⚠ The controller unit is made up of precise parts and sensitive sensors. Please pack it in a sturdy box, put the cushioning material to avoid shock, please deliver by courier.



► When replacing, reassemble in the reverse order of removal.

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• Product Specifications

Product Name		CURADLE PRO PLUS 160 / CURADLE PRO PLUS 160C	CURADLE PRO 160	CURADLE MAX 160
Model name		PX-ICU160+ / PX-ICU160C	PX-ICU160	MX-ICU160
Display		LCD (Touch screen)	LCD (Touch screen)	FND
Power supply voltage		AC 100-120M, 50/60[Hz] / AC 220-240M, 50/60[Hz]		
Temperature control range		15 - 5orq 59 - 122[°FJ	20 - 5orq 68 - 122[°FJ	20 - 5orq 68 - 122[°FJ
External environment temperature		Optimum range: 20 - 25[°C] 68-77[°F]		
Humidity control range		30 - 70[%]		
External environmental humidity		40 - 60[%]		
Oxygen concentration control range		20 -40[%]	X	X
Carbon dioxide concentration control range		500 - 4000[ppm]	X	X
Power Consumption		MAX. 400[W] Average. 95[W]	MAX. 350[W] Average. 90[W]	MAX. 300[W] Average. 85[W]
weight		57[kg]	56[kg]	55[kg]
Size	External	W 916 x L 532 x H 768[mm]		
	Internal	W 692 x L 470 x H 494[mm]		

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• Guide to Consumer Damage Compensation

This product cannot be registered as a free service extension. The warranty period is one year.

Types of Consumer Damage	Compensation History	
	Within warranty period	After the warranty period
In case of naturally occurring failure of function, performance under normal use conditions	Free repair	Paid repair
Failure of function, performance by consumer's intention, mistake	Paid repair	
▪ If a malfunction occurs due to natural disasters (fire, salt, gas, earthquake, flood, etc.) ▪ If replacing consumable parts that are normally worn in use ▪ If a fault occurs due to abnormal power supply or defective connection equipment ▪ If a failure occurs due to repair or alteration made by a person other than the repair agent of the head office or agency ▪ Other external causes not the fault of the product itself ▪ If a fault occurs due to different rated voltage ▪ If failure occurs due to use of unspecified consumables or optional parts not specified by our company ▪ In case of failure or damage due to dropping when moving etc ▪ Failure caused by non-cleaning ▪ If the malfunction /consumer error caused by wrong operation of the machine is obvious ▪ Failure during use in a manner not described in the manual		

&, The manufacturer or distributor is not responsible for any life loss or property damage caused by user's carelessness, alteration, change of purpose, power failure, natural disaster, etc. To avoid errors, please read the user's manual carefully before use.

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CURALDE is designed for user's easy and convenient use.
It can be changed without notice for improvement in performance, design, treatment and software, etc.

Ver.1.2

www.curadle.com

SELLER	MANUFACTURER
	AUTOELEX CO.,LTD. OFFICE : 218, Sangdong-ro, Gimhae-si, Gyeongsangnam-do, 50805 Korea TEL : +82-55-1588-8771 FAX : +82-55-1544-2862 E-MAIL: sales@autoelex.com

Choose Curadle for the best design, highest quality, value and performance!