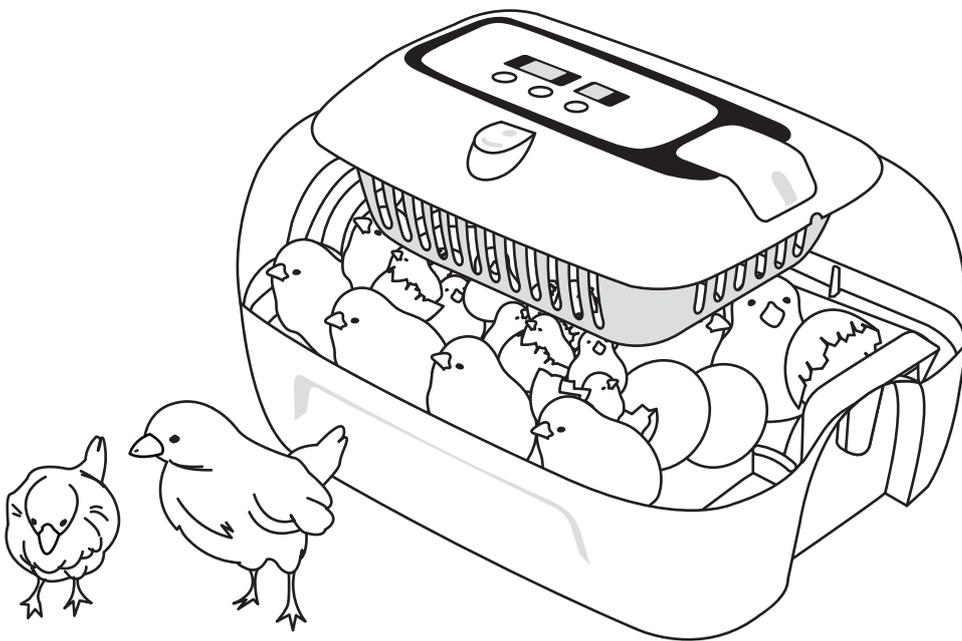


# KINGSURO MAX BROODER

## User's Manual

### DIGITAL BIRD BROODER

**Model : MX-SUROHBN** (Without APS)  
**MX-SUROHB** (APS included)



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

**Rcom**

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**⚠ The manufacturer, or the vendor does not take responsibility for any loss of animal life or property damage caused by user's carelessness, remodelling/painting, changing purpose of use, outage, and etc. In order to avoid malfunctions, please use after carefully reading the user's manual.**

### Mark Explanation



**Caution :** Caution mark against a fault that can cause damage, trouble, or failure of brooding.



Prohibited.



It is necessary to keep.



Do not disassemble.



Remove the power cord from outlet.



Do not touch.



Ground Connection for preventing electric shock.



**Tip :** References or useful suggestions in using Rcom product



**Warning of actions which may be dangerous or cause damage to the brooder.**

## ● Rcom KINGSURO MAX BROODER

To begin with, we sincerely thank you for purchasing Autoelex's product. BROODER was developed with optimal design to create the best environment by the interpretation of air flow channel inside brooder using computer simulation and it applies the latest technology in order to automatically control the brooding environment. BROODER is designed to enable optimal setting for all environments required for brooding. For successful brooding and proper use of BROODER, please read the instruction manual carefully before using.

## ● Features of Rcom KINGSURO MAX BROODER

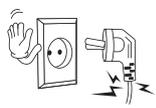
### [Main Features]

- \* Automatic Temperature setting and control
- \* Artificial intelligence electronic control device to automatically adjust the cycle of brooder according to the ambient conditions
- \* Clear and transparent large view-window
- \* Variable air control lever to control air amount inside the brooder
- \* Applying Rcom's optimum air flow technology to avoid the fan's air from directly touching bird
- \* Enhanced reliability by applying Swiss's Sensirion's 3rd generation temperature & humidity sensor
- \* Convenient humidifier with Automatic Pumping System (APS) - Option

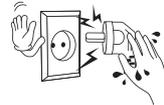
### [Easy Features]

- \* Degree C / degree F interchangeable
- \* Alarm and indicator function for abnormal high or low temperature by drastic and unusual outer temperature change
- \* Brooding data memory function and power outage notification function in case of power outage
- \* Closed structure to avoid waterdrops (condensation) on the view window from leaking out of brooder
- \* Rotating heater support which conveniently controls the tension of the heater
- \* The bottom is made with meshed skid-resistance floor to prevent young birds from deformity in their leg
- \* Application of Water Nipple to supply water easily for humidification - Option
- \* Automatic humidification function for minimum 2 minutes (Press + button for 10 sec.) - Option
- \* The Automatic Pumping System (APS) for accurate humidification, as a pump of silicone tube, is structured to make tube changed with easy and durable by installing mini roller on the four areas with friction - Option

## ● Electrical hazards



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



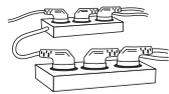
! Do not pull the cord when taking out the power cord, and keep wet hands away from connecting plug. Risk of electric shock or fire.



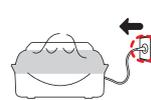
⊘ Never unplug when using the unit. Operation interruption may result in loss of life inside the unit.



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



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

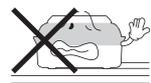


! If the machine will be stored for a long time, please clean it before and after storage. Accumulated dust can pose a fire or shock risk.

## ● Installation, use related precautions



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



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



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



! 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.



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



! 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.



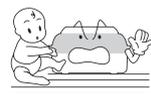
! Do not place the power cord near sources of heat. The coating on the cord may melt and cause fire or electric shock.



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



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



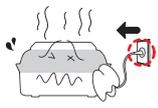
! Do not allow children to climb on the product. A fall of the product may cause injury or death.



⊘ 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.



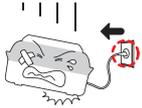
! Be careful not to let foreign substances into the external hole of the product. It may cause electric shock, fire, and physical injury.



! 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.



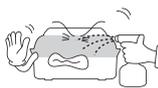
! Do not cover the ventilating opening. Inner temperature can rise, interrupting brooding.



! 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.

## ● Cleaning related precautions

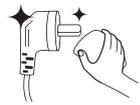
### ⚠ CAUTION



! 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.



! Clean the brooder by a soft cloth with a neutral detergent.



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



! When cleaning, 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.

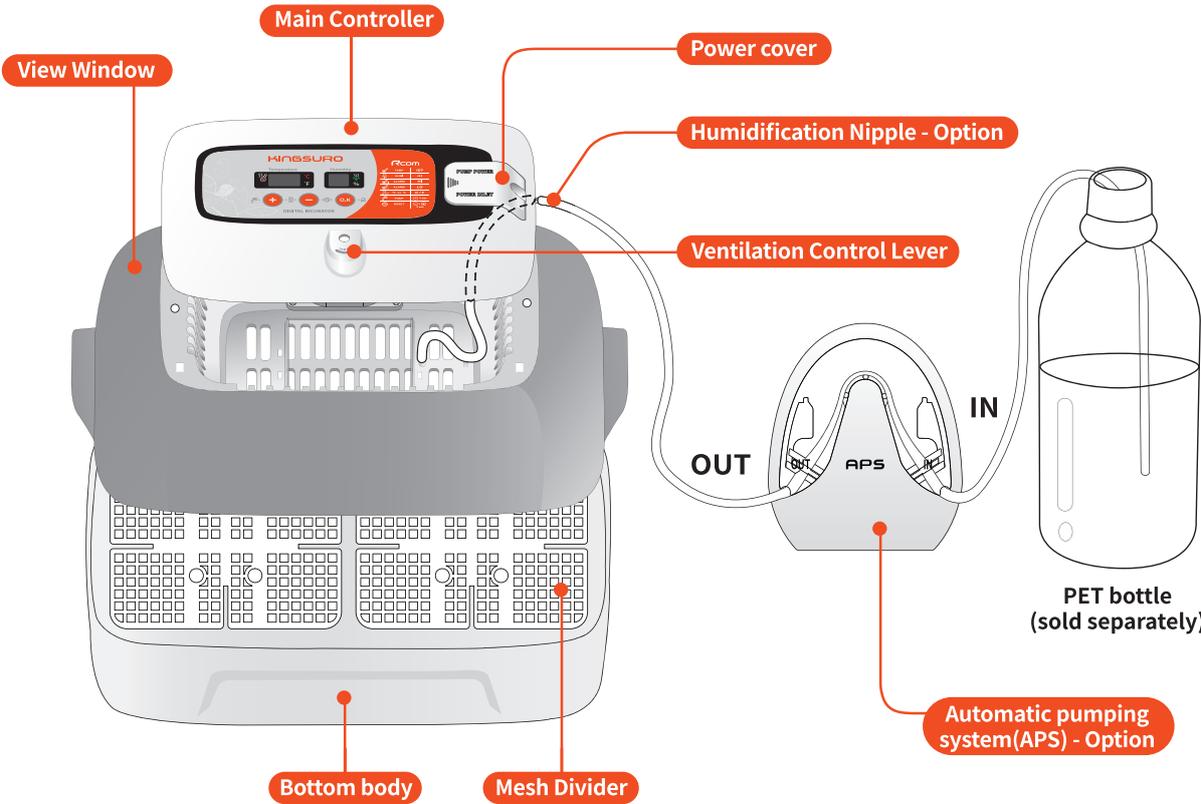


! At least once a year, please contact our service center or customer service center to check the machine. Failure to clean dust inside the product for a long period of time may cause fire or malfunction.

# 1. Introduction

(3) Name of each part and basic components

- Name of each part and basic components



# 1. Introduction

(4) Names and functions of operational parts

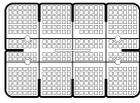
## ● Basic components

Your Serial no. located on left-side of the main controller. Please be sure not to get dirty or break. (ex:K20MB0000000000)

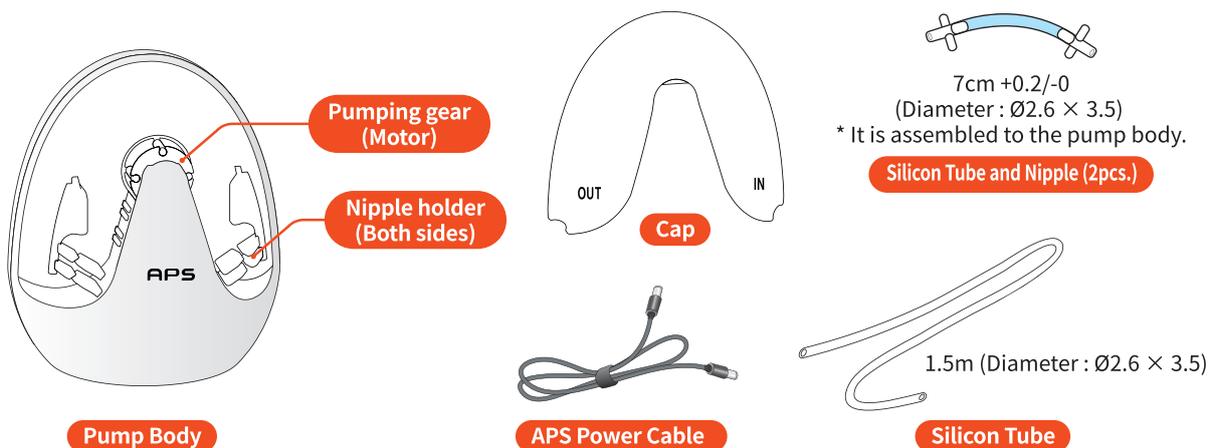


Rated voltage is marked inside of power cover. Be sure to check this before connecting power.

### Main Controller

			 Power Cover fixing bolt 1pcs.  Main Controller Assembly Bolts 2pcs.	
<b>Window</b>	<b>Mesh Divider 2pcs.</b>	<b>Bottom body</b>	<b>Bolt</b>	<b>Power cord</b>
	 Silicon Tube 12.5cm (diameter : $\varnothing 2.6 \times 3.5$ )		 Humidity Pad : Expendables Clip : Humidity Pad Fixing Use	
<b>Manual</b>	<b>Nipple - Option</b>	<b>APS SET - Option</b>	<b>Humidity Pad &amp; Clip - Option</b>	

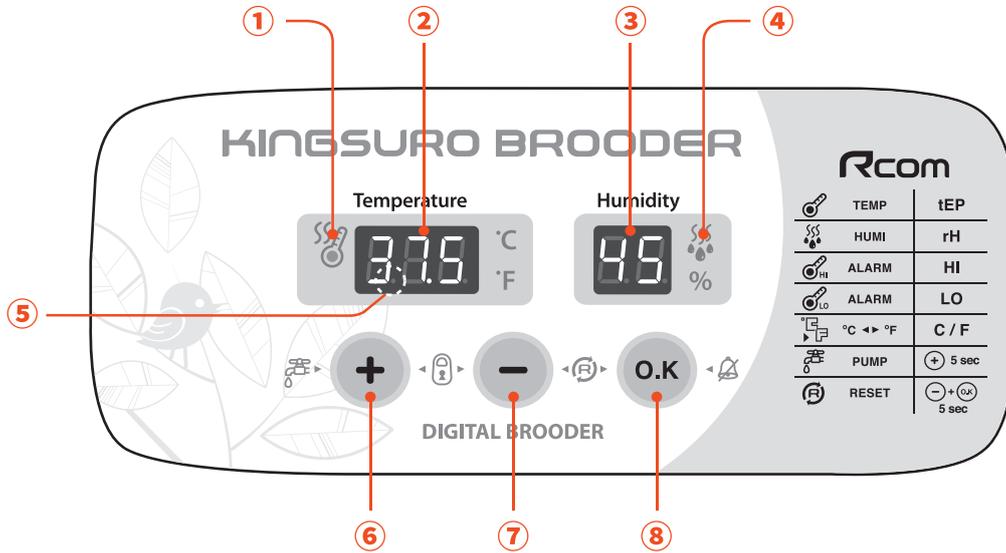
## ● APS components - Option



# 1. Introduction

(4) Names and functions of operational parts

## ● Name & Function of Operation Parts



### ● Names and components of each part

- ① **Heater Operation Lamp**  
: Light on when working
- ② **Temp. Display**  
: Current Temperature Display
- ③ **Humidity Display**  
: Current Humidity Display
- ④ **Pumping System Operation Lamp**  
: Light on when working
- ⑤ **Power Failure Alarm Function (FND light)**  
: Light on when power failure (Cancel Button : OK)
- ⑥ **Up Button**  
: Setting Temp. & Humidity UP
- ⑦ **Down Button**  
: Setting Temp. & Humidity DOWN
- ⑧ **Menu Selecting Button**  
: Setting Value check

**Tip** Automatic Pumping System(APS) - Option  
If you install APS,(which is sold separately,) you can use the function to increase humidity.  
if you want to control low humidity level, please adjust "Air Controlling Lever" by manual [refer to page 14]

⊕ · ⊖ · ⊕	Setting Mode: Press two buttons at the same time to go to Setting Mode.
o.k	Select Menu / Quick Movement / Cancellation / Setting value check during brooding
⊕	Value + / APS is forced to operate if press 5sec. / APS is forced to operate for 2min. if press 10sec.
⊖	Value - / Factory Initialization

### ● Function Key Press ⊕ ⊖ buttons at the same time to go to setting mode.

Function	Temp.	Humidity (Option)	Cooling Control Cycle	Abnormal High Temp. Alarm	Abnormal Low Temp. Alarm	Centigrade / Fahrenheit
Display	tEP	rH	CL	HI	LO	°C / °F
Default Setting	37.5°C	45%	OFF	2°C	-3°C	°C

## 2. Before use

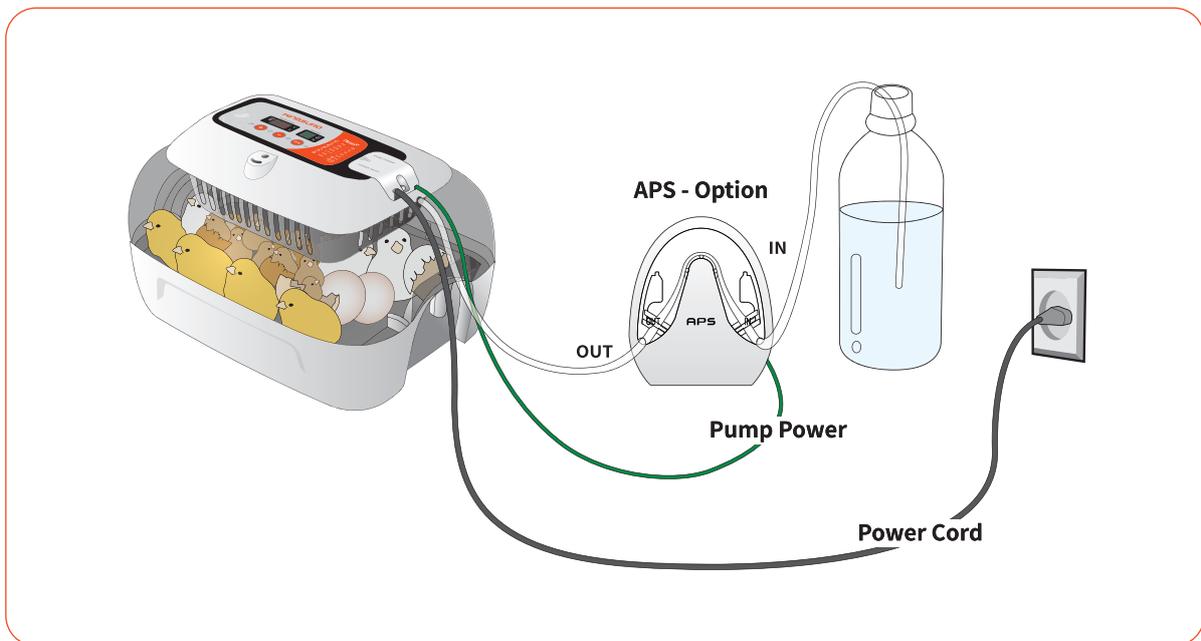
(1) Installation environment  
(2) How to Assemble

### ● Installation environment

Brooder is designed and manufactured to provide convenient use to customers through latest digital control technology. However, the following requirements must be followed, otherwise it may have fatal effects on the animal. The inside environment of the Brooder is largely affected by the installation environment and the equipment is recommended to be installed in a place where there are minimal noise and shock. An environment with small temperature difference with the surrounding temperature ranging from 22 to 28 (71.6~82.4°F) and humidity level of 40~60% is recommended. Careful monitoring is required as the temperature can drop rapidly during the night time. The Brooder must not be exposed to direct sunlight.

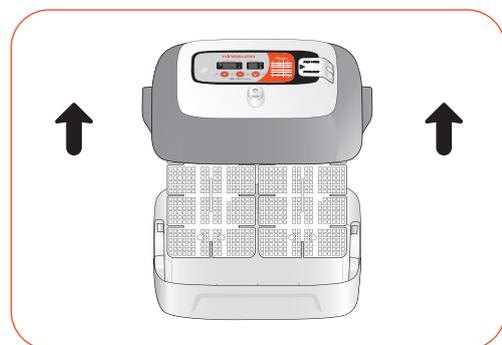
**⚠** When the temperature of brooding room is lower than, recommended setting temperature there could be water-droplets in side of brooding room or water leak on the floor. because of dew condensation.

### ● How to Assemble



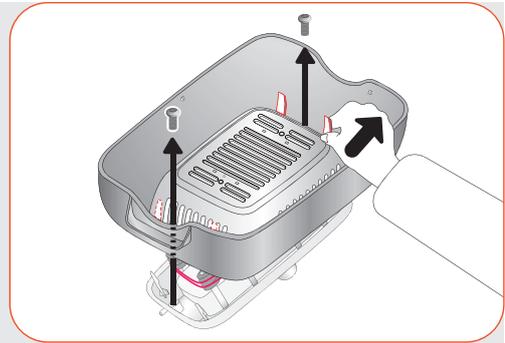
[ How to Assemble Main Body ]

- ▶ Please remove all packing from the brooder and parts. Then, check each part is present and undamaged. (Please keep the carton and packing materials for repacking to retain the brooder in good condition when not using.)

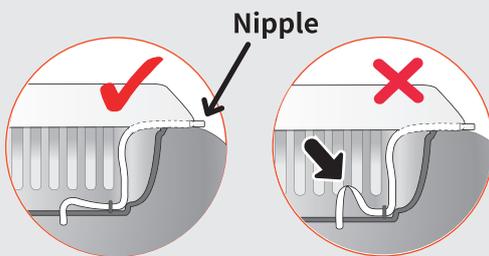


[Automatic Pumping System(APS) model]

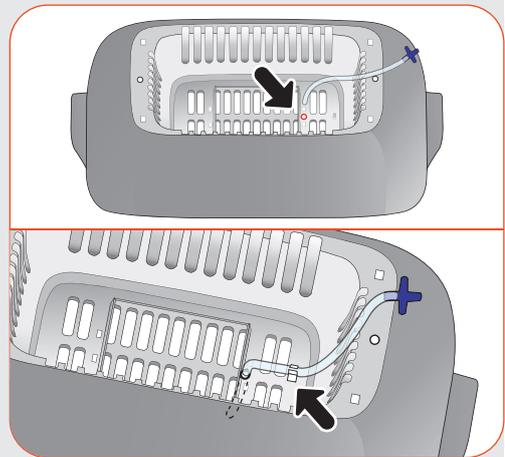
- ▶ Loose two bolts connecting main controller and view window. After that, disassemble main controller from view window by pulling 4 hooks on main controller.



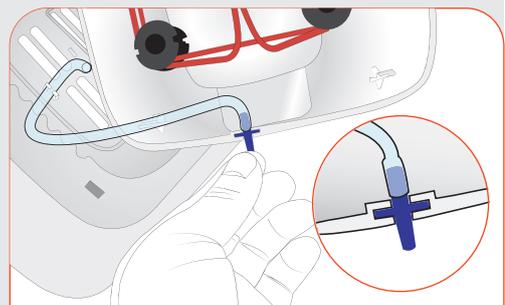
- ▶ Fix silicone tube which is assembled with nipple into the hole.



⚠ Be careful to ensure the silicone tube is not folded.



- ▶ Insert the nipple which is connected with view window to the hole of main controller, and assemble view window and main controller with two bolts.



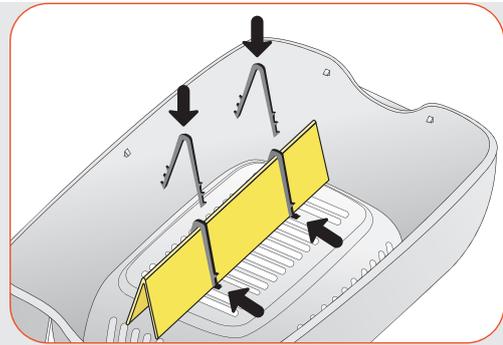
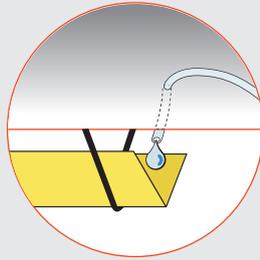
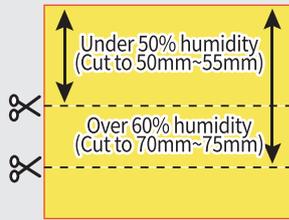
⚠ Do not tighten the bolts too much.



## 2. Before use

### (2) How to Assemble

- ▶ Cut Humidity pad to proper size, and then fix on the view window with 2 pins included.



- ⚠ Evaporating ability is different from pad size.

※ You can use Humidity pad for about 4 ~ 6 months, but it can be different depending on water quality.

※ Humidity pad can be purchased separately.

- ▶ Please assemble Bottom Body, Mesh Divider, View-Window, Main-Controller in order.

- ⚠ Ensure Mesh divider is placed on the bottom body. After using Mesh divider, completely wash and dry the Mesh divider straight away. It is re-useable.



- ▶ Place birds and cover view window.

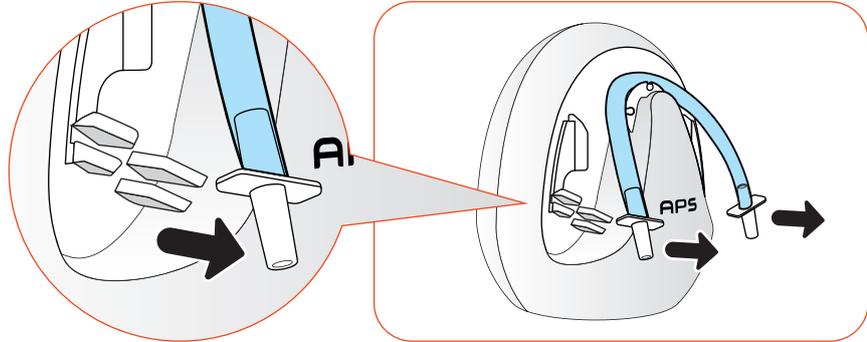
- ⚠ If view window is not closed completely, temp. fails to go up.

- ⚠ Test the brooder to be sure that the brooder works without any problem before placing birds in the brooder. Please ensure you remember how to use the machine and maybe re-read instructions.



### ● How to Assemble APS (Automatic Pumping System) - Option

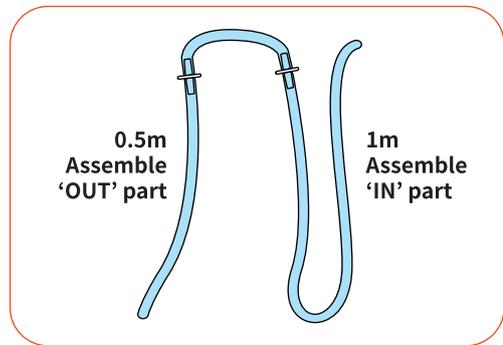
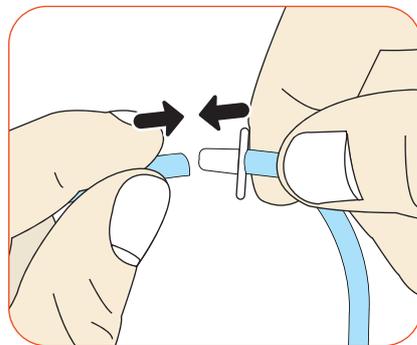
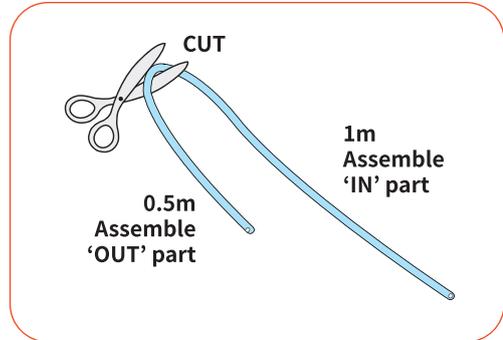
- ▶ Open the cap of the APS body.
- ▶ Remove the silicon tube & nipples from the APS body.
- ▶ Cut the silicone tube to 0.5m and 1m lengths.



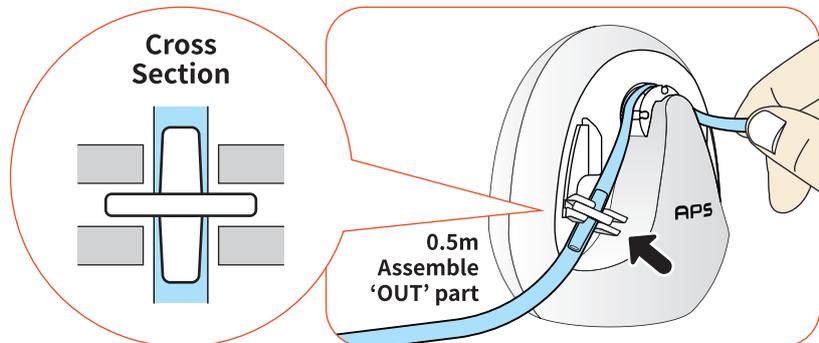
- ⚠ The silicone tube may become folded, causing a blockage. Please ensure that any blockages are removed by gentle pulling both ends of the tube before assembly.

- ▶ Attach the cut parts of the silicone tube onto the nipples on either side of the APS unit.

- ⚠ Please note that pumping performance will be reduced if the silicone tube isn't fitted tightly onto the nipple, or if the tube length is different.



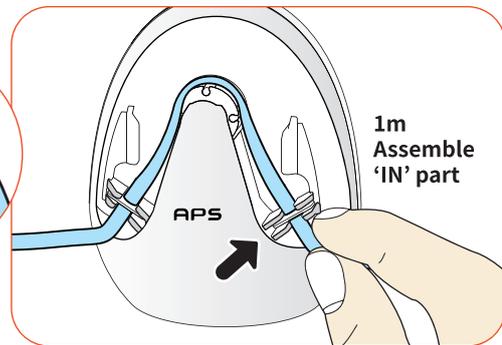
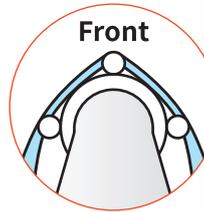
- ▶ As shown in Picture, insert a nipple, attached to 0.5m silicone tube, into the 'OUT' part (left-hand side) of the nipple holder.



## 2. Before use

### (3) APS Assembly / Tube Replacement / Storage and Cleaning

- ▶ As shown in Picture, insert a nipple, attached to 1m silicone tube, into the 'IN' part (right-hand side) of the nipple holder. (As for this part, short one is normal and it should be taut when installing)

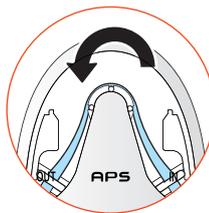


- ▶ Assemble the cap onto the pump body. Please make sure silicone tubes do not get jammed in the cap.

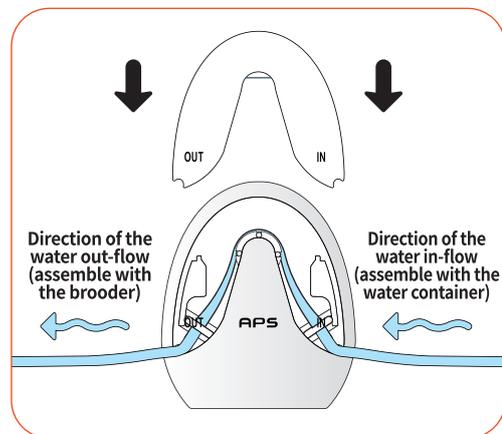
- ▶ Connect the APS power cable onto the power inlet at the back of the pump body.

- ▶ Please refer to booklet manual page 16 for how to assemble the APS with the brooder.

 As shown, water flows out of the left silicon tube, and comes into the right silicon tube.



Turning direction of the motor



### ● How to Replace the Tube - Option

- ▶ If the silicone tube wear out and it does not pump water effectively, you should replace silicone tube. [Refer to the page 12]

 Be sure to use the silicon tube supplied from Autoelex(Rcom). ( $\varnothing 2.6 \times 3.5$ )

 If water does not flow out even if pumping motor is working, check if silicon tube is blocked or folded.

※ If pumping doesn't work well during use, lightly pull the end of the tube downward and check if the motor is turning counter clockwise. Pumping may not work if the specification of the silicon tube does not match with ours ( $\varnothing 2.6 \times 3.5$ )

### ● Storage and Cleaning - Option

- ▶ Do not wash APS with water but wipe with soft cloth.
- ▶ In case of long time storage, detach the silicon tube from the APS and remove the water from the tube. Keep the tube uninked. It stops the tube hole from blocking.
- ▶ When assembling again, stretch the tube to open the hole in case the tube is blocked.

#### ● Air Maintenance

▶ Please open air ventilation fully.

※ Air Controlling Lever :  
Outer fresh air can be flowed into the brooder inside  
without affecting insulation.



#### ● Dew Condensation

▶ When breeding chicks, dew condensation can form on View-Windows.  
However, it is a normal occurrence when the temperature difference is big between inside and outside of the brooder.  
We encourage 28°C(82.4°F) for the outside temperature on suitable installation of the brooder.

※ How to reduce Dew condensation of View-Windows

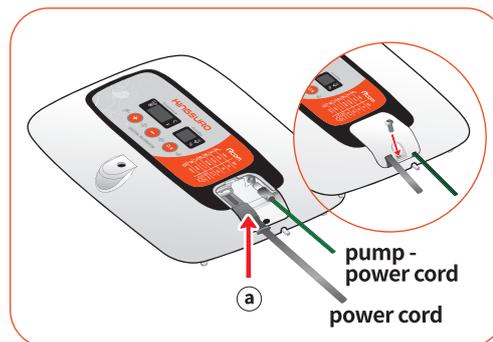
1. Please clean the bottom of brooder frequently.
2. Do not install the brooder in excessively cold conditions.  
(Suggested room temperature is 28°C [82.4°F])
3. Please spread sawdust or pieces of paper which absorb moisture well on the bottom of brooder.
4. Please tape on the water bowl like '+' as a picture.
5. Please open Air Ventilation fully.



### ● Brooder Installation

- ▶ Open the power cap, and insert the brooder power cord and pump power cord.

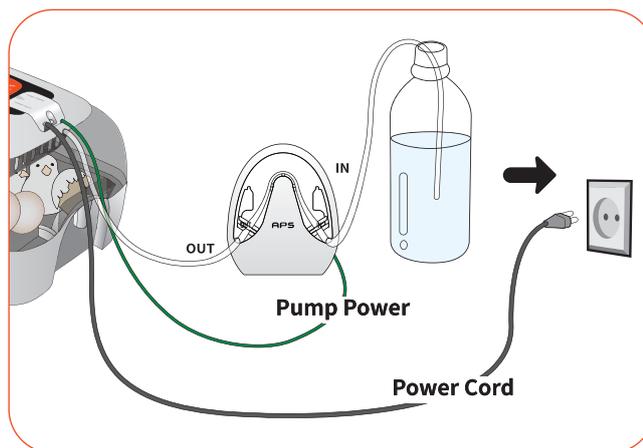
- ⚠ Be careful to ensure the cords do not get jammed when you tighten screw bolt.
- ⚠ If you open power cap, there is a sticker which is showing rated current in the position of pic.Ⓐ.



- ▶ Connect silicon tube end of APS(Automatic Pumping System) into the nipple of brooder, and the other end into PET bottle.

- ⚠ Please place the brooder, APS pump, and water bottle on a level surface and at a similar height. The recommend height of the water bottle is 250mm.

- ▶ Be sure to check rated current Pic.Ⓒ before connecting power cord to outlet.
- ▶ Press **+** button for about 10 sec. for pump operation, and it automatically stop after 2min. If you want to stop pump operation, press any key.



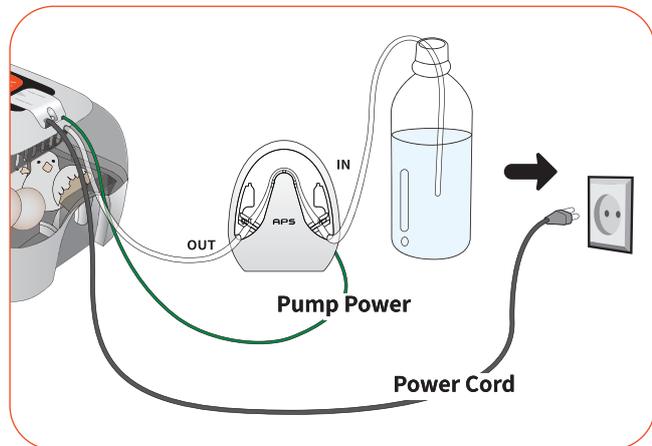
- ⚠ If you do not insert silicon tube exactly, it will not work properly. [Refer to the page 12. How to replace silicon tube.]

### ● How to Start Brooding

- ▶ If you connect power cord, the brooder starts brooding with factory set conditions. [Factory setting : Temperature 37.5°C (99.5°F), Humidity RH 45%]

 There can be some odor the first time you use brooder, which is normal.

- ▶ The internal temperature of Brooder must be changed according to growth period of the birds.



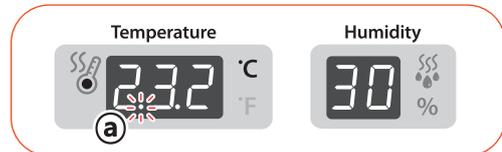
- ▶ The first time you connect power, FND light will blink and pump will work for about 2sec. Then, brooder version will be indicated on FND for about 1 sec.



- ▶ After version indication, buzzer sounds for about 15sec. At the same time, present temp. & humidity displayed and power failure alarm indication (a) is blinking.

- ▶ Press (OK) button to remove buzzer and alarm indication. (Buzzer will be removed automatically after 15sec.)

※ Notice of Power Failure : If power is turned off and then on again because of power failure or by mistake, first dot will blink.



 **Quick Start :**  
If you just connect power, it automatically starts brooding with factory setting. [Factory setting : Temperature 37.5°C (99.5°F), Humidity RH 45%]

- ▶ brooder display current temperature and humidity, and it goes to setting conditions within an hour.

 Put the birds in the brooder, and then operate 1~2 hours, checking that the internal temperature is stabilized. If you readjust the temperature, continue to check the accuracy of the temperature.

※ The artificial intelligence system memorizes and classifies ambient conditions for keeping optimum temperature, and temperature can move up slowly setting value.

Poultry	Suitable temperature	Suitable chick quantity
1~10days after hatching	36~38°C	10 chickens
11~20days after hatching	30~33°C	5~7 chickens
21days~after hatching	below 30°C	Although it may different slightly depending on bird species, chickens can be grown outside.

### 3. Function Settings

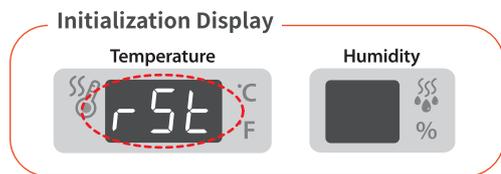
(1) Brooder Termination  
(2) Brooder Initialization (3) Return to Factory Setting

#### ● Brooder Termination

- ▶ There is no specified ON or OFF button on the brooder. Just unplug the power cord.
- ▶ It is not necessary to do initialization with KING SURO MAX BROODER after brooding. Just connect power again when you want to start brooding.

#### ● Brooder Initialization

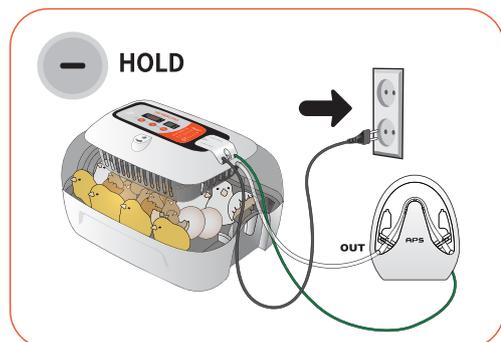
- ▶ This function can be used when user input wrong setting, or brooding termination.
- ▶ Press  and  button at the same time for about 5sec. then display will show "rSt" and brooder returns to default setting.



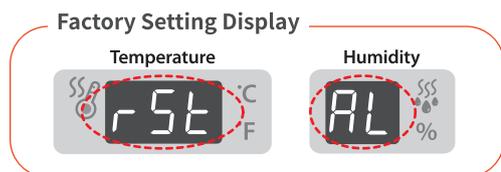
 Calibrated setting value will not be initialized with this function.  
[If you need to initialize calibrated setting, refer to FACTORY SETTING]

#### ● Return to Factory Setting

- ▶ This function is for returning the brooder to factory setting.
- ▶ Unplug the power cord. Replug during  button is pressed. Then, "rSt AL" will indicated in display, and the brooder returns to factory setting. [Default setting]



 Calibrated temperature and humidity will also return to factory setting.

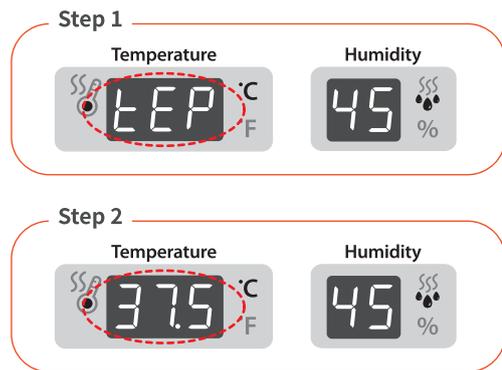


#### ● Temperature Setting

 **Function Key**

Function	Temp.	Humidity (Option)	Cooling Control Cycle	Abnormal High Temp. Alarm	Abnormal Low Temp. Alarm	Centigrade / Fahrenheit
Display	tEP →	rH →	CL →	HI →	LO →	°C / °F
Default Setting	37.5°C	45%	OFF	2°C	-3°C	°C

- ▶ Press  and  button at the same time then “tEP” will be indicated for about 0.5sec. and then temp display will blink.
- ▶ Then, you can adjust temperature with  and  button. [Default setting: 37.5°C (99.5°F)]
- ▶ After setting required temperature, press  button once then setting will be stored. Next, “rH” will indicated in humidity display for about 0.5sec. and then humidity display will blink.



※ Just press  button if you do not need to change setting.

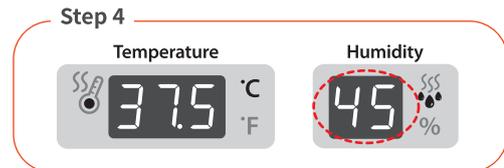
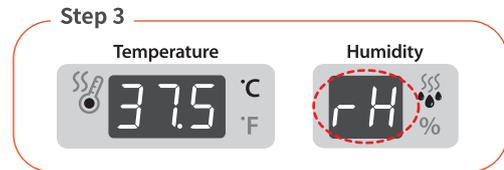
 **In the first time when putting the birds, adjust temperature after 1~2hours for stabilization. Please do not turn high from the first time, raise temperature from low to high little by little carefully.**

### 3. Function Settings

(5) Humidity Setting  
(6) How to set cooling Control Cycle

#### ● Humidity Setting - Option

- ▶ From the temperature setting, press **(O.K)** button once and “rH” (Humidity) will be displayed for 0.5 second and humidity display will blink.
- ▶ When humidity display is blinking, adjust humidity setting with **(+)** or **(-)** button.  
[Default setting : RH 45%]
- ▶ After setting required humidity, press **(O.K)** button once then setting will be stored. Next, “CL” will be indicated for about 0.5sec.



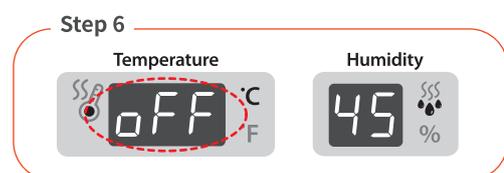
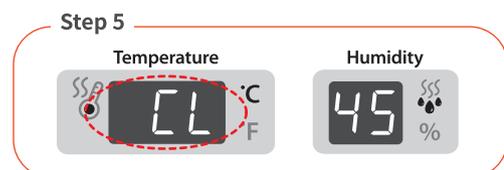
※ Just press **(O.K)** button if you do not need to change setting.

**Tip** The temperature and humidity level is optimized according to the international standard at the time of shipping. It could be recalibrated by the user if the user wishes to do so, but this is not recommended. When in need of adjustment, please refer to our homepage ([www.Rcom.co.kr](http://www.Rcom.co.kr) → Information → User Manual Category) or contact the place of purchase. Commercially available thermometer and hygrometers may have drastic measurement deviations, so it is recommended to use thermometer and hygrometer designated for this purpose. [Designated Thermometer and hygrometer – Refer to Rcom Homepage]

**Tip** Kingsuro is available to automatic humidity raise only, if you want to control low humidity level, please adjust "Air Controlling Lever" by manual [refer to page 14]

#### ● How to set cooling Control Cycle

- ▶ From the humidity setting, press **(O.K)** button once and “CL” (cooling control cycle) will be displayed for 0.5 second and temperature display will blink.
- ▶ When temperature display is blinking, adjust cooling control cycle setting with **(+)** or **(-)** button.  
[Adjustment scope : OFF ~ 6h(hours) in 1 hour as a unit]  
[Default setting : OFF]
- ▶ After setting required cooling control cycle, press **(O.K)** button once then setting will be stored. Next, “HI” will be indicated for about 0.5sec. and then maximum temperature limit will link.



※ Just press **(O.K)** button if you do not need to change setting.

**Tip** What is COOL(cooling control) Function? It is a function which cools during the setup time among the 24 hours of a day. The periodic cooling is helpful for successful hatching but you might need preliminary knowledge to perform the cooling control process.

### 3. Function Settings

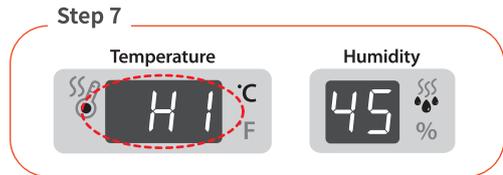
(7) How to Set Abnormal High & Low Temp. Alarm

#### ● How to Set Abnormal High Temperature Alarm

\* Max. abnormal temp. alarm limit (0.0 ~ 5.0°C Default Setting: 2.0°C)

**Tip** Abnormal High temperature : This function gives notice when brooder temperature is higher than setting temperature because of abnormal ambient temperature increase. When room temperature is higher than brooder temperature, this function works with buzzer. Here, "HI" and temp. gap are displayed alternatively. Press OK button to remove buzzer.

- ▶ From the cooling control cycle setting, press the **OK** button once and "HI" (abnormal High temperature alarm) will be displayed for 0.5 second and temperature display will blink.
- ▶ Adjust abnormal high temperature value with **+** or **-** button. [Default setting : 2°C (2°F)]
- ▶ After setting required value, press **OK** button to save. Then, it will go to the next stage, abnormal low temp. setting with display "LO" for about 0.5 sec.



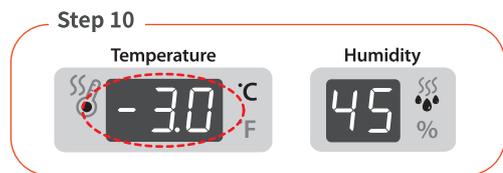
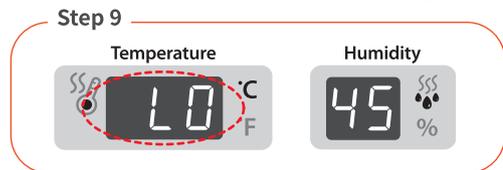
ex : ※ It shows that the set temperature value is approximately 3°C (3°F) higher than the actual cabinet temperature of the machine.

※ Just press **OK** button if you do not need to change setting.

#### ● How to Set Abnormal Low Temperature Alarm

\* Min. abnormal temp. alarm limit (0.0 ~ -5.0°C Default Setting: -3.0°C)

- ▶ This function gives notice when brooder temperature is lower than setting temperature because of abnormal ambient temperature decrease.
- ▶ From the Abnormal High Temperature Alarm setting, press the **OK** button once and "LO" (abnormal LOW temp. alarm) will be displayed for 0.5 second and the temperature display will blink.
- ▶ Adjust abnormal low temp. setting with **+** or **-** button. [Default Value: -3°C (-3°F)]
- ▶ After setting required value, press **OK** button to save. Then, it will go to the next stage, °C & °F change.



**Tip** Abnormal Low Temperature: "LO" will indicated on LCD. (The others, same with abnormal high temp. alarm function.)

ex : ※ It shows that the set temperature is 2°C (2°F) lower than the actual cabinet temperature of the machine.

※ Just press **OK** button if you do not need to change setting.

### 3. Function Settings

(8) How to change Centigrade & Fahrenheit  
(9) Work Automatic Pumping System by Force

#### ● How to change Centigrade & Fahrenheit

- ▶ From the abnormal LOW temperature alarm setting, press **(OK)** button once and “C.F” (Celsius/Fahrenheit) will be displayed for 0.5 second and LED for “C” will blink.
- ▶ Select °C or °F with **(+)** or **(-)** button.
- ▶ After selecting °C or °F, press **(OK)** button to save.  
[Default setting : °C]

 °C = 5/9 (°F - 32)

※ Just press **(OK)** button if you do not need to change setting.

##### Step 11



##### Step 12



#### ● How to Work Automatic Pumping System(APS) by Force - Option

- ▶ Press **(+)** button for about 5sec. during brooding process. Then, PUMP will operate by force with LED light on.
- ▶ Press **(+)** button for about 10sec. then pump motor works for 2min. by force. It still works for 2min. even if you remove your finger from the button.

 If you press **(+)** button for about 10sec. pump will operate for about 2min. Press any key to remove.

##### APS by Force



## 4. Brooding / 5. How to separate and clean

(1) Maintenance after Hatching  
(1) How to separate and clean

### ● Maintenance after Hatching

- ▶ Newly-hatched chicks are weak, and need time to recover. Chicks have to be transferred to the brooder or brooding room after hatching. [we recommend the brooder or brooding room temperature is 35~37°C(95 ~ 98.6°F)] Please tape on the water bowl like '+' as a picture. (To prevent a drowning accident of chicks)

**!** If you put too much water into drinkers, chicks could fall into the water bowl and their wet feathers can cause hypothermia, leading to the death of the chicks. In this case, dry the wet feathers with a hair dryer.

- ▶ When breeding chicks, dew condensation can form inside of the brooder. If you want to reduce this phenomenon, please refer to Ref. 14P.
- ▶ Clean all the contaminants off the cabinet floor and replace sawdust, wood shavings or finely cut paper.
- ▶ There are differences in bird feeding due to their various species, so please find out proper feeding before hatching. (we have many information for bird breeding on our web-site.)

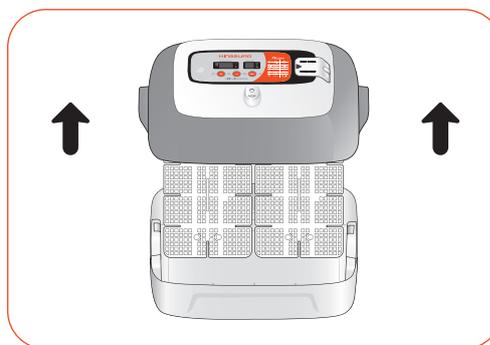
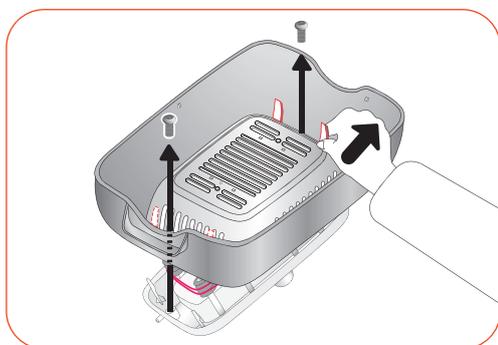


Water Bowl

### ● How to Disassemble and Clean

**!** Be sure to take off power cord before cleaning the brooder.

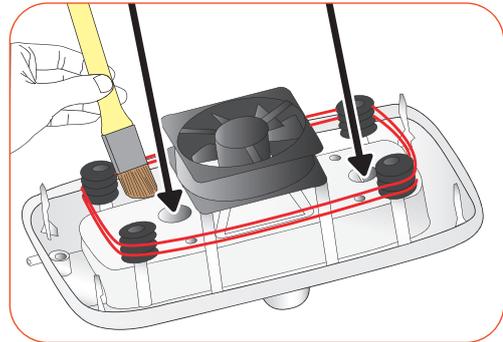
- ▶ After brooding terminated, never leave the brooder covered with view window. Moisture inside of the brooder vaporizes and it can stick to electric parts causing operation failure. Be sure to dry the brooder perfectly.
- ▶ Remove main controller from view window. [Refer to the page 10]



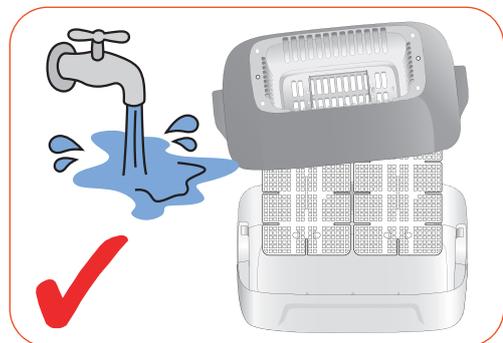
## 5. How to separate and clean

(1) How to separate and clean

- ▶ Wipe the main controller smoothly with soft brush. Be careful not to give impact to sensor part or heating part
- ▶ Temp. & Humidity sensor is assembled with connector for easy replacement in case of trouble.

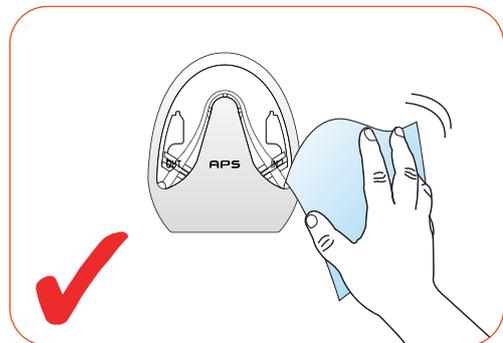


- ▶ Wash the window, mesh divider and bottom body with warm water.

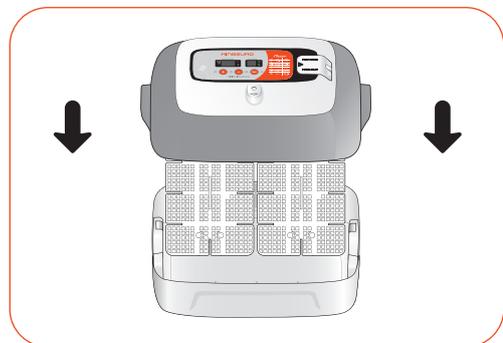


- ▶ Do not wash Automatic Pumping- System(APS) with water, just wipe with a soft cloth.
- ▶ Please remove the water in the silicon tube of the APS and leave to dry completely.

**⚠ Do not use benzene or thinner when wipe the unit. It can cause transformation or decoloration.**

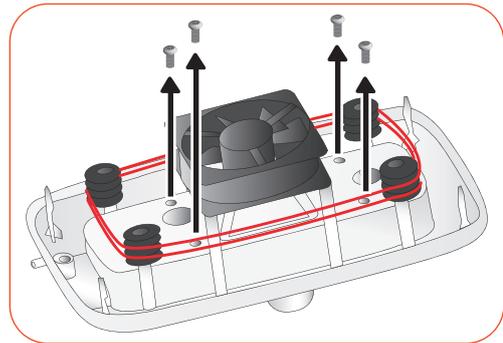


- ▶ Wipe the exterior with a soft cloth, and completely dry before storing.

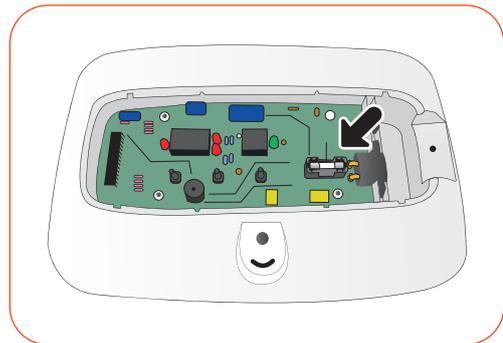


#### ● How to Replace the Fuse

- ▶ If power does not turn on even if you connect the plug, check fuse.

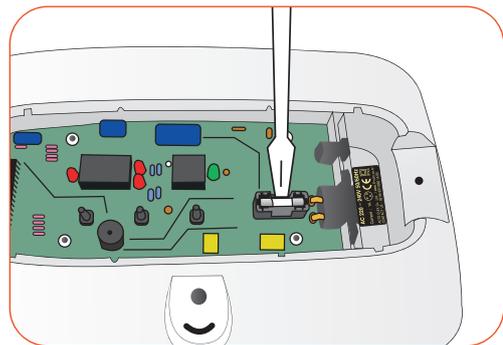


- ▶ Open the cover as Fig. then you can see fuse equipped PCB. Remove damaged fuse with screwdriver.



- ▶ Replace with new fuse.  
(250V 2.0A Ø5\*20mm)
- ▶ Reassemble with the opposite order of disassemble.

※ If the cover is not completely closed, moisture preventing ring will not be attached correctly and moisture can be flow in to the PCB part.



### ● Troubleshooting

For more detailed self-diagnosis, see Rcom homepage “SELF DIAGNOSIS” category.

Circumstance	Items to be confirmed	Solutions
<b>No signs of power to the brooder.</b>	<ul style="list-style-type: none"> <li>▶ Check electric cord is properly connected.</li> <li>▶ Check if there is a power outage.</li> <li>▶ Check whether the plug is damaged.</li> <li>▶ Check the fuse is not blown. [Refer to the page 24]</li> </ul>	<ul style="list-style-type: none"> <li>▶ Connect the cord again.</li> <li>▶ Check the main socket with any other electric appliances.</li> <li>▶ Try to insert to another outlet.</li> <li>▶ Replace the spare fuse in the fuse box. (250V 2.0A)</li> </ul>
<b>When temperature is too high / When temperature is too low</b>	<ul style="list-style-type: none"> <li>▶ Check your setting temperature.</li> <li>▶ Check the air circulation FAN is working.</li> <li>▶ Return to factory setting. [Refer to the page 17]</li> </ul>	<ul style="list-style-type: none"> <li>▶ Set the temperature as required.</li> <li>▶ Take the power plug out of the outlet, and disassemble the main body for cleaning around the air circulation fan with brush.</li> </ul>
<b>When humidity is too high / When humidity is too low</b>	<ul style="list-style-type: none"> <li>▶ Check water is enough.</li> <li>▶ Check setting humidity.</li> <li>▶ Initialize the brooder. [Refer to the page 17]</li> </ul> <p>&lt;When Low&gt;</p> <ul style="list-style-type: none"> <li>▶ Check if evaporating pad is fit well.</li> <li>▶ Check if view window is closed completely.</li> </ul> <p>&lt;When High&gt;</p> <ul style="list-style-type: none"> <li>▶ Check ambient conditions.</li> <li>▶ Check if there is water in bottom body.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Supply water.</li> <li>▶ Set required humidity.</li> </ul> <p>&lt;When Low&gt;</p> <ul style="list-style-type: none"> <li>▶ If evaporating pad does not fit well, humidification device will not work well.</li> <li>▶ Close view window exactly.</li> </ul> <p>&lt;When High&gt;</p> <ul style="list-style-type: none"> <li>▶ Adjust the conditions of room temperature [Refer to the page 9]</li> <li>▶ Remover water inside of bottom body.</li> </ul>
<b>The machine makes some noise.</b> - A little noisy occurs from the inside of circulation fan.	<ul style="list-style-type: none"> <li>▶ Check whether you put anything on the brooder.</li> <li>▶ Check if there is any vibration, or check the brooder set on a table.</li> <li>▶ Check if there is any hatching debris such as feather in the brooder FAN.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Ensure the brooder is not touching any other items and nothing is on top of the unit.</li> <li>▶ Move the brooder to a flat and even surface.</li> <li>▶ Unplug from socket and separate main body to clean FAN area for air circulation with a brush or writing brush.</li> </ul>
<b>Dew forms in the brooder.</b> - Dew condensation is normal with high humidity brooding.	<ul style="list-style-type: none"> <li>▶ Check if brooding room temperature is too low.</li> </ul>	<ul style="list-style-type: none"> <li>▶ Check conditions of brooding room, and adjust as required.</li> </ul>
<b>When pumping is slow</b>	<ul style="list-style-type: none"> <li>▶ Check Silicon Tube</li> </ul>	<ul style="list-style-type: none"> <li>▶ The insides of the tube may be stuck together or blocked. Before assembly, ensure that the tube is opened up by gently pulling on both ends.</li> </ul>

 Test the brooder to be sure that the brooder works without any problem before placing birds in the brooder. Please ensure you remember how to use the machine and maybe re-read instructions.

## 6. Product Information

(3) Specification /  
Guide to Consumer Damage Compensation

- **Specification**      1-1 Name : Rcom Kingsuro MAX Brooder  
                                 1-2 Model : MX-SUROHBN (Without APS) / MX-SUROHB (APS included)

Power	AC 100~120[V], 50/60[Hz] / AC 220~240[V], 50/60[Hz]
Power Consumption	Average 25[W]    Max. 48[W]
Temp. limits	20 ~ 42[°C] / 68 ~ 107.6[°F]
Humidity Limits	20 ~ 70[%] (It can be changed according to the conditions)
Capacity	Chick : 10~15                  Duck : 7~10                  Turkey : 7~10 Pheasant : 25~30              Quail : 30~40              Goose : 5~7
Weight	1.9[Kg]
Size	(W)370×(L)231×(H)209[mm]
Fuse Standard	250[V] 2.0[A] (Ø5*20[mm])

To provide the best warranty service, please register your product serial number on our website.  
Refer to website for how to register

※ **Product Registration Procedures**

If you are a new member of Rcom, you need to log in our website at [www.Rcom.co.kr](http://www.Rcom.co.kr)

1. Click "SIGN UP" on top of the right corner.
2. Fill out the information on the blanks.

If you already registered your information on the Rcom website, please log in to [www.Rcom.co.kr](http://www.Rcom.co.kr).

1. Click "Login" on top of the right corner.
2. Select "Customer" and click "Register Products".
3. Fill out the information on the blanks.

You will need below information to register on our website.

1. Your name
2. Your (home/company) address & Email address, country
3. Your product(model) name & Serial number
4. Date of purchase & Name of purchased shop you bought from

● **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 the naturally occurred breakdown in performance and function during normal use	Free repair	Paid repair
Breakdown in performance and function due to consumer's intention or fault	<b>Paid repair</b>	
<ul style="list-style-type: none"> <li>■ In case of the breakdown caused by Natural disaster (fire, damage from sea wind, gas, earthquake, damage from storm, etc.)</li> <li>■ In case of exchanging the consumable parts that are worn normally during use</li> <li>■ In case of the breakdown caused by power problem and connector defect</li> <li>■ In case of the breakdown because the person who isn't a repair technician of main office or agency repaired or recomposed</li> <li>■ In case that the breakdown was made by the external cause, not other product's own defect</li> <li>■ In case of the breakdown caused by different use of rated voltage</li> <li>■ In case of the breakdown caused by the use of the consumables and optional products undesignated by this company</li> <li>■ In case of the breakdown or damage caused by the falling during movement</li> <li>■ Breakdown occurred by no cleaning</li> <li>■ Breakdown occurred by wrong machine operation</li> <li>■ Breakdown occurred by using with the method that wasn't suggested in the instruction / the case that consumer fault is obvious.</li> </ul>		

 **The manufacturer, or the vendor does not take responsibility for any loss of animal life or property damage caused by user's carelessness, remodelling/painting, changing purpose of use, outage, and etc. In order to avoid malfunctions, please use after carefully reading the user's manual.**

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