# **AUTOSPAYBOOTH**

## **User Manual**

# Safety precautions

# Maintenance manual



User manual

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Safety precautions

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Safety precautions







Company: Sovsystem
Product: Autospraybooth
Model: ASB-ALPHA-01
Manufacturer: Sovsystem
Country of Origin: Korea
Verification number
R-R-soV-ASB-ALPHA-01



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### 1. AUTO-ROTATE: Sets the number of rotations and speed of the turntable.



- Led: Sets the brightness of the light.
  - 1, the brightness set in the SETTING menu.
  - 2, Operates at default high brightness (Brightness 2 cannot be set separately)
- Laps: sets the number of rotations of the turntable. If set to 90, it will rotate 9999 times.
- Speed: Sets the speed of the turntable.
   You can set the speed from very slow to 40 steps.
- LR: After rotation, it moves in the opposite direction.

If you press the left and right buttons at the same time and release one button, the speed setting value will be changed.

A short press of the left or right button will return you to the start menu.

Long press the left and right buttons to enter power saving mode.

### 2. MANUAL ROTATE: Sets the rotation angle and speed of the turntable.



- Angle: It has a 45 degree angle rotation function.
   It can be set up to 720 degrees.
- Speed: Sets the speed of the turntable.
- LR: After rotation, it moves in the opposite direction.

You can adjust to higher values by touching slightly above or below the arrow control buttons.

### 3. DISPLAY: Temperature control and rotation are repeated at intervals of about 10 minutes.



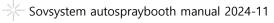
- Speed: Sets the speed of the turntable.
- Direction : Determines the direction of the turntable.
- Drying : Set the drying intensity
   During the drying, the ventilation fan stops rotating.
- Temp: Executes the drying function within the specified target temperature.
- DisplayOff: You can turn off the LCD display while in display mode operation.
- Humidity: The drying function operates when the specified humidity is lower than the current humidity.
- Fan: The ventilation fan can be operated while the turntable is in operation. It will not operate while the drying function is in operation.
- Auto-Start: After powering off and then turning back on, it immediately enters DISPLAY mode.

#### 4. AUTO-FAN: Set the ventilation fan operation time.

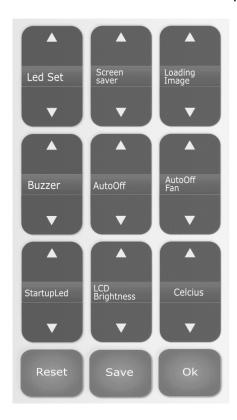


- Fan On minute: Set the fan operation time.
   The time displayed on the screen is in minutes and is adjusted in 3-minute intervals.
- Interval 30minute: After the fan starts, it waits for the set time. After the set time, the fan starts again.
- Set in 30-minute increments.
- ex) Fan On minute 3, interval 30minute 1 set:3 minutes of operation, then 30 minutes of waiting.
- ex) Fan On minute 9, interval 30minute 2 set:9 minutes of operation, then 1 hour of waiting.
- Hour, Minute: After the set time and minutes, the device stops operating and enters power saving mode.
- Turn table : Rotate the turntable.
- Timer: ON/OFF Hour-Minute Timer function. interval fan operation settings are maintained.

0:Stop, 1:Execution

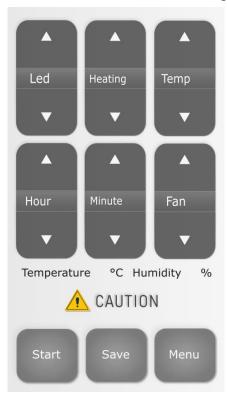


#### **5. SETTING**: This is the autospraybooth settings screen.



- Led Set: Sets the LED brightness. It works at 9 for maximum brightness.
- Screensaver : You can set a background image.
- LoadingImage: loading screen image.
- Buzzer: Sets the intensity of the alert sound.
- AutoOff: You can set the time in minutes before it automatically enters power saving mode.
   Exception) set to 100: 1000 minutes set to 0, disable automatic power saving mode
- CPU stops 30 minutes after automatic power saving mode (standby power approx. 3.5W)
- AutoOffFan: Entering powersaving mode, fan stops.
   0: Fan on, 1: Fan off delay, 2: off immediately
- StartupLed: Automatically turns on the light when the spray booth starts. 1 user-defined brightness, 2 system-defined high brightness
- LCDBright: Sets the LCD display brightness.
- Celcius, Fahrenheit: Temperature Unit Conversion

### **6. DRYING**: This is the settings screen before starting the drying function.

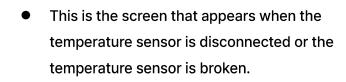


- Heating: Sets the drying intensity in 9 steps.
   Temp: Target temperature up to 50 degrees.
- Hour, Minute: You can set the fan operation time
- Fan: stop or turn on the ventilation fan
   When set to 1, the fan on
   when set to 0, the fan turns off.
- Install the front case while the drying
- The temperature displayed is the air temperature inside the heating plate. The temperature of the heating plate can rise above 70 degrees.
- Remove the plastic cap during drying operation.

**6.** DRYING2: This is the screen while the drying function is in operation.

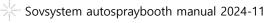


- Fan On minute: Sets the fan operation time. The heating function automatically stops while the fan is operating.
- Interval 10minute: After the fan starts operating, the heating drying function is executed. The number displayed on the screen is in 10-minute units.
- It runs continuously by repeating the fan rotation and heating/drying modes.
- Fan: You can start or stop the ventilation fan function.
- Turntable: The turntable can rotate.
- The screen displays temperature, humidity, and remaining time and minutes...
- The temperature of the heating plate is very hot, so be careful when using it.



- Temperature sensor failure may not be detected and careful observation is required during use of the heating and drying functions.
- The temperature displayed during drying mode gradually increases to the air temperature inside the heating plate.







7. LED: Turn on the LED lights.

On the start screen, a short press of two buttons will turn the LED on or off.

8. POWER SAVING: Power saving mode

Press and hold both buttons to enter power saving mode.

### 9. Button

On the control menu screen, briefly press the two **49** buttons to return to the start screen.

On the start screen, briefly press the two **O** buttons to turn the LED on or off.

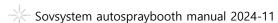
♠Holding the left button will decrease the LED brightness, ♠Holding the right button will increase the LED brightness.

On the start screen, briefly press the two **49** buttons and wait 1 second

- **⚠** Press both buttons to go to the system settings
- Press the left button to go to auto ventilation mode
- BRight click to go to drying mode

**⚠ B**Long press both buttons to enter power saving mode.

In power saving mode, you can control the LED brightness by holding down the right or left button. In power saving mode, press and hold both **49** buttons to enter full power saving mode.



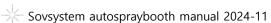


## **User Safety Precautions**

- 1. If a chemical solution is leaked onto the floor, there is a risk of electric leakage or damage to parts, so be sure to turn off the power, tilt it to one side, and drain it all through the hole in the floor. Use it after it is completely dry.
- 2. The product must be used at room temperature. Product deformation and failure may occur at temperatures above 50 degrees.
- 3. There is a risk of electric shock if you touch the motor while it is in operation.
- 4. When not in use, the fan should be turned on until it makes a noise, completely cut off the power, and when in use, set it to a voltage higher than the minimum voltage at which the fan operates to prevent damage to the motor.

When continuously setting it to high speed, it is necessary to periodically check the bolt and component fastening status. Since case vibration can cause the connection of case parts such as bolts to become loose, which can cause a malfunction, users should be careful to manage and maintain it in preparation for the risk.

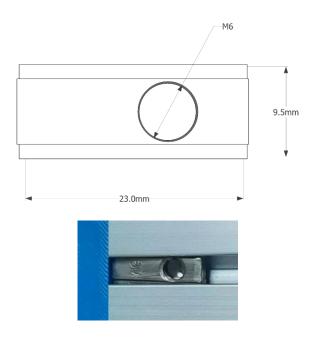
- 5. During product operation, you must always check to prevent risks such as fire or electric leakage.
- 6. If the product is damaged by impact, it must be inspected as there is a risk of fire or electric leakage due to product failure.
- 7. Always be cautious about safety as high temperatures, overvoltage, or usage environments may cause mechanical failure or equipment malfunction.
- 8. Forcibly stopping the motor rotation or causing a motor impact may cause malfunction, damage the electrical circuit, or cause mechanical parts such as bearings to fail.
- 9. Stop using the LCD display and abruptly switching on the power switch while the product image is loading or during startup. Excessive touching may cause LCD display failure.
- 10. When working in a dusty environment, wear a mask and ensure external ventilation.

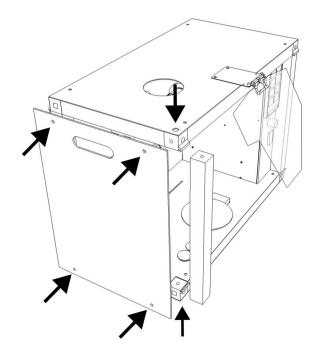


# **Maintenance Guide**

### How to combine cases

Insert the spring nut into the aluminum profile groove and assemble by turning the bolt with a hex wrench (H4) or by hand.





### **Fuse**

### Fuse specification: Glass tube fuse 20mm, 1.5A two (dual fuse)

After removing the power cable, open the fuse slot with a flat-head screwdriver or an awl and push it in as far as possible to remove the fuse. If an abnormality in the indoor electrical system or a malfunction occurs in the product, the fuse will short-circuit to protect the product. If the fuse is short-circuited, replace both fuses for maintenance.



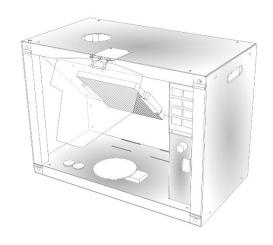
◆ The 3-prong power cord can be replaced to suit the national standards. (IEC IEC60320 C13)

There is a risk of electric shock in case of leakage, so be sure to disconnect the power cable before moving the device.

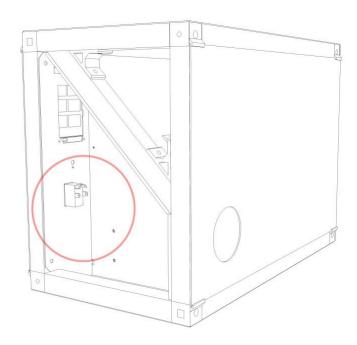
The case and ground are connected inside the painted surface, so in case of leakage, the external circuit breaker will trip and the fuse will short-circuit.

There is a risk of electric shock if you touch the inside of the case in case of leakage.

The case and aluminum profile frame are insulated and the insulation film can be damaged by scratches.



↑This side is insulated.



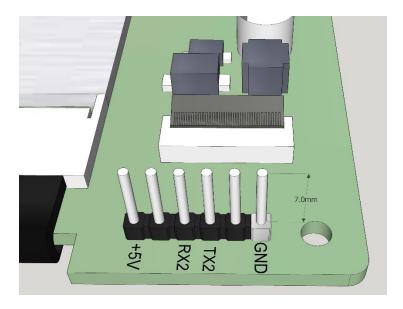
When moving the device or disassembling and servicing it, be sure to disconnect the power cord.

Even if the power is cut off with the front switch, there is a risk of electric shock if there is a current leak inside.

If the device does not work, disconnect the cord and have it inspected.



### LCD display



The most common cause of the LCD display not turning on or unstable connection is a poor connection of the connector jumper cable on the back of the LCD display. Check the connection of the jumper cable (ACC RX2 TX2 GND). If the LCD is defective, loosen the four nuts, be careful not to break the cable, and replace it.

If you frequently disconnect it, the jumper cable terminal may become loose and the connection may become weak. You can remove the plastic cap of the jumper cable and crimp it with pliers, or replace it by extending it.

Jumper cable specification: 2.54mm female

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#### Motor

Lubricating the two bearings on the front and rear of the motor of this product will reduce noise. Fill a small amount of bearing oil into the gap between the motor shaft and bearings on the front and rear.





A small amount of bearing grease can be used on the ventilation fan motor. If a large amount of lubricant is injected, it may cause serious malfunctions such as burning smoke or oily smell during high-speed operation, noise that gradually increases, or leakage current. If inappropriate lubricants such as spindle oil or engine oil are used, the motor will gradually malfunction and noise will increase. If a large amount of lubricant is applied to the bearing, the bearing temperature will rise, causing malfunction.

The autospraybooth ventilation fan motor is shipped with SYNCOLON (PTFE) grease applied.

We recommend using a product with confirmed heat resistance for the motor bearing.

Oil-type lubricants have low viscosity and may leak.



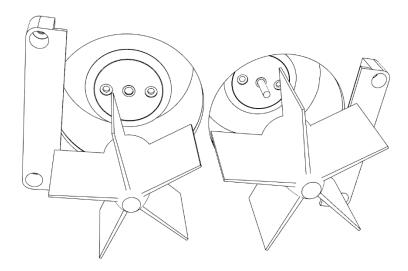


Grease

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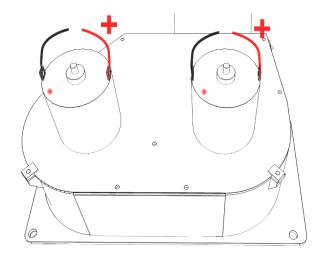


### How to disassemble the motor



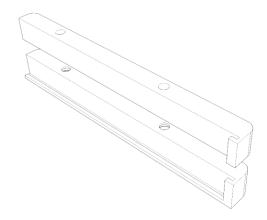
The fan blade and anti-eddy current cover can be removed by hand by pushing them in the opposite direction of the motor. If the fan blade is disassembled from the motor several times, it may become loose. If the fan blade becomes loose and detaches, You can temporarily attach it using a small amount of screw locking agent or a sealing agent. (Nezirok, Loctite, etc.) You can use a hex wrench (H2.5) to separate the two bolts from the motor bearing shield. If a large amount of dust is generated, the grooves of the wrench bolts should be protected with masking tape so that they are not blocked. Be sure to check the polarity of the electrical wires when replacing or removing the motor.

Both red and black wires must be connected to one motor. Connecting wires with the same polarity can cause equipment failure and a dangerous situation. If the positions of the black and red are reversed, the motor rotation will be reversed, reducing the wind speed and reducing energy efficiency. Be sure to check the polarity of the wires and install the terminals in the correct positions to prevent leakage.





### 에어필터



The air filter guide can be separated into 1st and 2nd stages by separating the bolts with a hex wrench (H5, H4). The air filter guide can be used by installing only the 1st stage filter. Even if both the 1st and 2nd stage air filters are installed, the wind pressure and air volume will not change much. Since the air filter is effective in reducing dust and motor noise, it is recommended to use the air filter even when exhausting outside. You can install filters of slightly different sizes by adjusting the fixing nut, and you can secure it tightly by attaching masking tape to the edge of the air filter. When using it for indoor air purification, it is recommended to install an activated carbon filter on the inner air filter. Activated carbon filters are highly effective in removing harmful gases. (Activated carbon filters are purchased separately.)





일반 헤파필터

활성탄 헤파필터

Air filter specifications: 225mm long - 202mm wide - 17mm high (199~202mm wide, up to 280mm long)

Product Number: 97133-2E200, 97133-2E210, CF10709, 08790-2E200 Hyundai, Kia compatible

### **Turntable**

### **Turntable Installation Sequence**



Attach the adhesive nonwoven fabric to the turntable top.



Install the gear protection guide by pushing it from left to right.



Install the turntable motor cover by pushing it from top to bottom↓.

The turntable uses grease that is effective in reducing noise. (Food grade grease is recommended.)

The auto spray booth turntable gear section is shipped unlubricated.

To lubricate, push the turntable motor cover up and remove it, and lift the gear protection guide slightly and push it to the side.

You can lubricate it without disassembling the bottom case.

