ARA Smart 6





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The appearance or specifications of the device is subject to partial change for improvement.

1. Safety



Follow precautions and all the safety requirements described on this user manual to prevent any damages and failure of equipment.

1-1. Caution: Installation

- 1. The device must be kept in a dry and well-ventilated room.
- According to IEC61010-2-020 maintain a 30cm "clearance envelope" around the device while the rotor is spinning.
- 3. Do not operate the device in areas where work is completed with explosice substances
- Connect the device to voltage sources which correspond to the electrical requirements on the label attached to the device.
- 5. Do not install the device at a place with high voltage regulation.

(Allowable voltage regulation limits : ± 10 %)

6. Use sockets with a protective earth conductor and suitable power cord.

1-2. Caution: Use

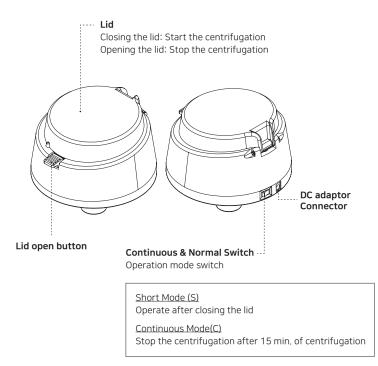
- 1. The device should be installed on flat surface to maintain level.
- 2. Always keep the device clean and dry
- 3. The balancing work of samples should be done in advance before operation.
- 4. Do not move the device or open the lid during operation.
- 6. Do not attempt to slow or stop the spinning rotor by hand.
- 7. Do not spill liquid on the device. If you spill liquid, shut off the power supply and unplug the powercord from the outlet and contact Hanil Technical Support Team.
- 8. Do not block vents.
- 9. Do not drop or subject the device to severe impacts
- 10. Caution when handling the AC/DC adaptor.
 - Do not bend or pull the AC/DC adaptor.
 - Use the AC/DC adaptor in dry room, away from heat and humidity.
 - Unplug the power plug before cleaning or left unused for a long period of time.

2. Intended Use

The Smart6 centrifuge is used for the separation of components.

In order to increase the usability, it is possible to use continuous mode or short mode only by switch operation.

3. Product overview



* Delivery package









Main body

Angle Rotor (1.5/2.0 mL x 6-hole)

Rotor (2-PCR Strips)

Rotor Cap Nut







Wrench (For rotor locking)

AC/DC adaptor

Manual

4. Technical Specifications

Max. RPM	6,500 RPM
Max. RCF	2,234 x g
Tube capacity	6 x 1.5/2.0 mL, 2 x 8-tube PCR Strips
Accel	4 sec
Decel	2 sec
Weight	0.65 kg
Power supply	DC 12V 2A , AC100~240V, 50/60Hz
Dimension	150W x 150D x 103H, mm
Cat. No.	AC-Smart 6

5. Installtion / Operation

· Check the delivery for completeness.

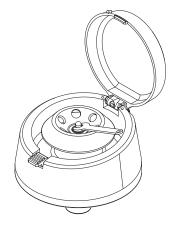
- The device should be installed on flat surface to maintain level.
- Do not bend or pull the AC/DC adaptor.
 - · Keep this manual near the device at all times.

5-1. Power connection

- 1. Connect the power cable to the power socket on the back side of the device and plug the cord into the outlet.
- 2. A beep sounds when the power is connected.

5-2. Operation

- 1. Installing the rotor
- Load the rotor vertically onto the motor shaft.
- Put the cap nut on the center of the rotor and turn the wrench clockwise untill it secured.



2. Starting/Stopping the centrifugation



Short Mode (S)

- When the lid is closed, centrifutaion starts. Continuous Mode (C)

- Operataion stops after 15 min. of operation.

- 3. Opening the lid
- Press the lid open button.



 Do not open the lid until operation is completely stopped as it will decelerate immediately when the lid is opened during operation.

6. Troubleshooting

The device can not be started

- 1. Power failure
 - \rightarrow Check the mains connection.
- 2. AC adaptor defect
 - \rightarrow Check the output DC volt of the adapter using a multimeter
- 3. Lid sensor failure
- → Contact Hanil Technical Support Team.
- 4. If the beep does not sound right after connecting the power supply, contact Hanil Technical Support Team.

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