

## Display & Control

### Display

Status of RPM, RCF, Time, Temperature, ACC, DEC, Running, Lid open/close

### Setting Speed

Touch once : RPM  
Touch twice : RCF

### Setting Time

### Temp / Fast Cool

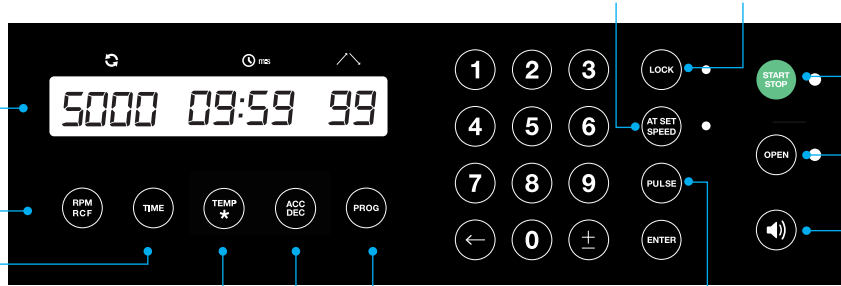
Touch for more than 2 seconds to reach rapid refrigeration up to setting temp

### At set Speed

On : Counts the time at set speed / Off : Counts the time from starting Touch more than 2 sec. : Repeat time of end alarm (time : 0 ~ 99, 0 : silent)

### Key Lock

LED On : Key lock  
LED Off : Key unlock



Max. RPM / RCF	Fixed-angle	5,000 rpm / 3,983 xg
	Swing-Out	5,000 rpm / 4,218 xg
Program		100
Time Control	Pulse, timed < 100 hr or continuous	
ACC/DEC	9 (Max 9) / 10 (Natural 0)	

### Start / Stop

### Lid Open

LED On : Lid open  
LED Off : Lid closed

### End Alarm

Sound volume (level : 0 ~ 10, 0 : silent)

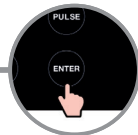
### Setting RPM / RCF, Time, ACC / DEC



Touch  
RPM / RCF,  
Time, ACC / DEC



Set the desired  
values by touching  
the numeric keys.

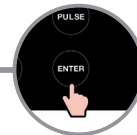


Touch the  
Enter button

### Program SAVE / CALL



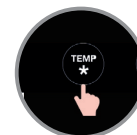
Touch the Save or Call button.→  
Touch the numeric buttons to set  
the desired program number



Touch the  
Enter button

Touch once : CALL / Touch twice : SAVE

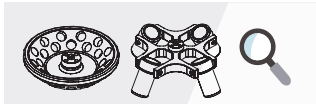
### Fast Cool



Touch and hold the Fast cool button

## Cautions For Use

### Before Operation



#### Check the Accessories for Abnormalities

Check the rotor, buckets and tubes are free of scratch and crack before operation.



#### Check the Rotor Locking

Check the rotor is firmly tightened onto the motor shaft.



#### Balancing the Centrifuge and Rotor

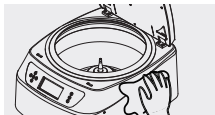
After relocating the device or loading the rotor, balance them by using a leveler. If necessary, level the device by adjusting the 'Leveling foot' on the bottom of the device.



#### Load Tubes Symmetrically

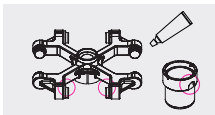
Load tubes symmetrically into the rotor with identical amount.

### After Operation



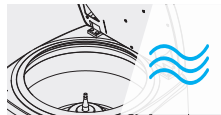
#### Cleaning

Clean the chamber and rotor by wiping with a cloth soaked in mild detergent and dry completely.



#### Care of Swing-Out Rotor

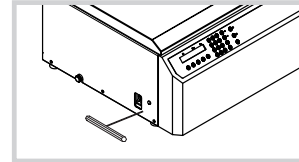
After cleaning, lubricate bucket grooves, pivots of swing-bucket rotors and threads of the angle rotors using the lubricant.



#### Keep the Chamber Dry

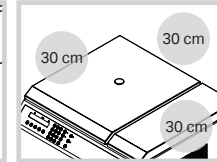
Wipe up the moisture in the chamber with a dry cloth after use. Keep the lid open when not in use.

## Maintenance



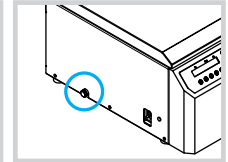
#### Emergency Lid Open

If the centrifuge lid cannot be opened, insert the provided T-wrench into the emergency release hole on the left side of the device and turn it clockwise. (Before activating emergency open, switch off the device and wait for the rotor to stop.)



#### Keep a Safety Clearance

Keep a safety clearance of 30 cm around the centrifuge during operation.



#### Empty the Condensate

Empty the condensate regularly by removing the drain cap on the left side of the device

## Electrical Safety

Power Requirement	900VA
Rated Voltage, Hz	220V 50/60Hz (110V Optional)

#### Check the Line Voltage

Connect the device to voltage sources which correspond to the electrical requirements on the label attached to the device.



#### Grounded Outlet

Check the wall outlet is earth grounded, surge-protected and can supply enough power.



#### Switch Off the Device

Switch off the device after use. Unplug the power plug before cleaning or unused for a long period of time.

## Rotor

### Fixed-angle Rotors

A-15-24	24 x 15 mL / Max. 5k
A-50c-10	10 x 50 mL Conical / Max. 5k
A-50-10	10 x 50 mL / Max. 4k

### Swing-out Rotors

S-mw-2	2 x 4 MTP / Max. 4k
S-15-6	6 x 2 x 15 mL / Max. 4.4k
S-50-4	4 x 50 mL / Max. 5k
S-100-4	4 x 100 mL / Max. 4.5k