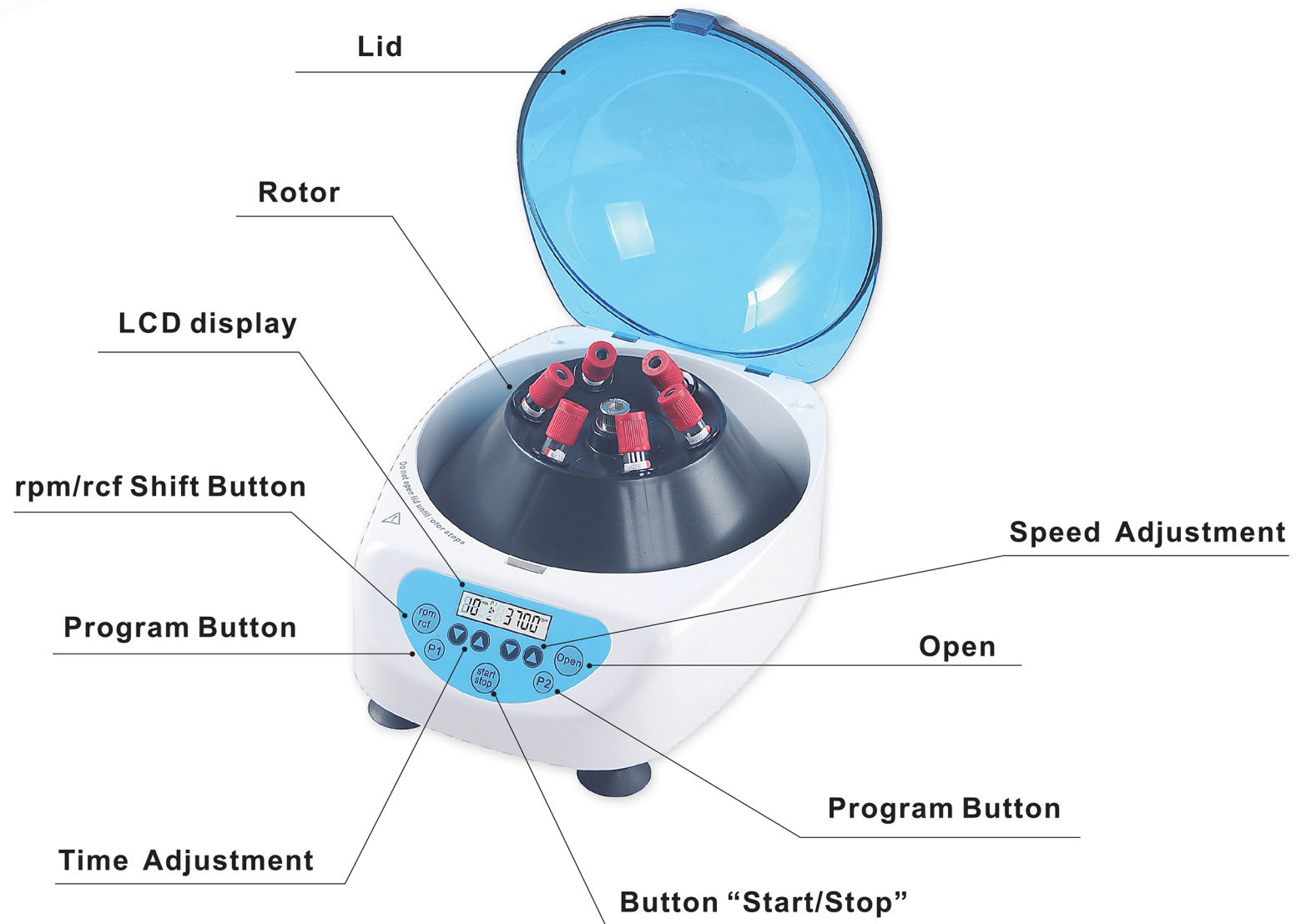


Centrifuge



Operating Instructions

Designation




Technical Data

Description				
Maximum rcf	2500xg	2500xg	13680xg	2500xg/4850xg/13680xg
Input	DC 24V/4A	DC 24V/4A	DC 24V/6A	DC 24V/6A
Rotor capacity	4×50ml/15ml/10ml/7ml/5ml/3ml/1.5ml tubes	6×15ml/10ml/7ml/5ml/3ml/1.5ml tubes	24×75mm hematocrit tubes	For 6×15ml/10ml/7ml/5ml/3ml blood collection tube or 4×50ml centrifuge tube or 24×75mm hematocrit tube or 12×0.5ml+12×1.5ml/2.0ml+4×8×0.2ml microtube
Speed	From 300r/min to 5000r/min	From 300r/min to 5000r/min	From 500r/min to 12000r/min	From 300r/min to 5000r/min or from 500r/min to 8500r/min or from 500r/min to 12000r/min
Timer	15s-99min / continuous operation	15s-99min / continuous operation	15s-99min / continuous operation	15s-99min / continuous operation
Motor type	Brushless motor	Brushless motor	Brushless motor	Brushless motor
Dimension	212x270x158mm	212x270x158mm	212x270x158mm	212x270x158mm
Weight	4.5kg	4.5kg	4.5kg	5.5kg
Per ambient temperature	+5bis+40°C	+5bis+40°C	+5bis+40°C	+5bis+40°C
Per relative humidity	80%	80%	80%	80%
Protection type acc.to DIN EN 60529	IP21	IP21	IP21	IP21
Contamination	Level 2	Level 2	Level 2	Level 2
Overvoltage category	II	II	II	II
Operation at a terrestrial altitude	Max.2000m	Max.2000m	Max.2000m	Max.2000m

Safety Instructions

















- **Read the operating instructions in full before starting up and follow the safety instructions.**
- Keep the operating instructions in a place where they can be accessed by everyone.
- Ensure that only trained staff work with the appliance.
- Follow the safety instructions, guidelines, occupational health and safety and accident prevention regulations.
- The voltage stated on the nameplate must correspond to the mains voltage.
- The device must only be operated with the original plug-in power supply unit.
- Wear your personal protective equipment in accordance with the hazard category of the medium to be processed. Otherwise there is a risk of:
 - splashing liquids
 - projectile parts
 - body parts, hair, clothing and jewelry getting caught.
- Set up the appliance in a spacious area on an even, stable, clean, non-slip, dry and fireproof surface.
- The feet of the appliance must be clean and undamaged.
- If the centrifuge movement of the appliance increases (resonance), reduce the speed or pass through the critical phase as quickly as possible.
- Reduce the speed if
 - the medium splashes out of the vessel because the speed is too high
 - the appliance is not running smoothly
 - the appliance begins to move around because of dynamic forces.

- Rotor must be fastened on the motor shaft tightly. Ensure that the rotor locking screw is tightened, especially after changing rotors
- Check the appliance and accessories beforehand for damage each time you use them. Do not use damaged components.
- Never touch the rotor until it comes to a complete stop
- Do not move the centrifuge while it is running.
- Beware of the risk of
 - flammable materials
 - glass breakage as a result of mechanical shaking power
- Only process media that will not react dangerously to the extra energy produced through processing. This also applies to any extra energy produced in other ways, e.g. through light irradiation.
- **Do not** operate the appliance in explosive atmospheres, with hazardous substances or under water.
- Safe operation is only guaranteed with the accessories described in the "Accessories" chapter.
- Always disconnect the plug before fitting accessories.
- The appliance does not start up again automatically following a cut in the power supply.
- Protect the appliance and accessories from bumps and impacts.
- The appliance may heat up when in use.
- The appliance may only be opened by experts

 Each time, when put test tubes into rotor, must maintain the tubes symmetrical balance. The centrifuge would automatically open function of vibration protection and stop working if without balance.

Package

- Please unpack the device carefully
- In the case of any damage a fact report must be set immediately (post, rail or forwarder)
- A complete set of device includes the following accessories

Model	Destription	
 Centrifuge	Widely use in clinical labs and blood donation centers	
 Rotor	For 4x50ml/15ml/10ml/7ml/5ml/3ml/1.5ml tubes	
 Power supply	AC100 - 240v, 50 - 60Hz	
 Manual	Operating instructions	
 Centrifuge	Widely use in clinical labs and blood donation centers	
 Rotor	For 6x15ml/10ml/7ml/5ml/3ml/1.5ml tubes	
 Power supply	AC100 - 240v, 50 - 60Hz	
 Manual	Operating instructions	
 Centrifuge	Widely use in clinical labs and blood donation centers	
 Rotor	For 24x75mm hematocrit tubes	
 Power supply	AC100 - 240v, 50 - 60Hz	
 Manual	Operating instructions	
 Centrifuge	Widely use in clinical labs and blood donation centers	
 Rotor	For 6x15ml/10ml/7ml/5ml/3ml blood collection tube or 4x50ml centrifuge tube or 24x75mm hematocrit tube or 12x0.5ml+12x1.5ml/2.0ml+4x8x0.2ml microtube	
 Power supply	AC100 - 240v, 50 - 60Hz	
 Manual	Operating instructions	

Operating

Operating process

1. Plug in power cable on the socket at the back of instrument, then connecting power supply.
2. Turn on the power at the back of instrument.
3. Press “Open” button to open the lid.
4. Insert test tubes with liquid filled into rotor symmetrically.
5. Close the lid and press down by hand till “click” is heard, make sure the lid is well locked.
6. Press ▼▲ button to get target speed and time.
7. After setting the speed and time, press “start/stop” button to start the instrument.
8. Lid automatically open at the end of working.
9. Opening lid and taking out test tubes.

Change rotor

1. Plug in power cable on the socket at the back of instrument, then connecting power supply.
2. Turn on the power at the back of instrument.
3. Press “Open” button to open the lid.
4. Turn off the power at the back of instrument.
5. Use hexagon wrench to discharge the rotor.
6. Select the rotor you need.
7. Install the rotor on the instrument.
8. Close the lid and press down by hand till “click” is heard, make sure the lid is well locked.

Program button P1&P2

1. Press ▼▲ button to get target speed and time.
2. Press on P1 or P2 button for three seconds until hearing the sound of beep, it has remembered your setting speed and time.
3. Press on P1 or P2 button once when you want to use the setting speed and time.
4. If you want to replace your last date, please press on P1 or P2 button for three seconds again until hearing the sound of beep.

Maintenance

The appliance is maintenance-free.

Cleaning

Use to remove:

Dyes	isopropyl alcohol
Construction materials	water containing tenside/ isopropyl alcohol
Cosmetics	water containing tenside/ isopropyl alcohol
Foodstuffs	water containing tenside
Fuels	water containing tenside

- Do not allow moisture to get into the appliance when cleaning
- Wear protective gloves during cleaning the devices.
- Before using another than the recommended method for cleaning or decontamination, the user must ascertain with factory that this method does not destroy the instrument.

Repair

In case of repair the device has to be cleaned and free from any materials which may constitute a health hazard.

If you require servicing, return the appliance in its original packaging. Storage packaging is not sufficient. Please also use suitable transport packaging.

Warranty

In accordance with factory warranty conditions, the warranty period is 12 months. For claims under the warranty please contact your local dealer. You may also send the machine direct to our works, enclosing the delivery invoice and giving reasons for the claim. You will be liable for freight costs.

The warranty does not cover wearing parts, nor does it apply to faults resulting from improper use or insufficient care and maintenance contrary to the instructions in this operating manual.

The logo for Waverly, featuring the word "WAVERLY" in a bold, blue, sans-serif font. The letter 'A' is stylized with a triangle inside it.

Distributed by:

SoCal BioMed, LLC
4695 MacArthur Ct., 11th Fl.
Newport Beach, CA 92660

Phone: (424) 400-2340
Email: info@socalbiomed.com

www.socalbiomed.com