

# Quick Guide

**Date and Time** 



## Refrigerated, Large Capacity, High-Speed Centrifuge

2236R

## **Display & Control Panel**

#### **Setting Speed**

Touch a part of [SPEED].

### Setting ACC / DEC

Touch a part of [ACC] or [DEC] ACC (1 ~ 9 / Max. 9) DEC (0 ~ 9 / Natural DEC 0)

#### Rotor

Show the Cat. No. of coupled rotor. Touch the rotor name to check rotor list which can be used with the centrifuge.

#### Menu

Touch a part of [MENU] to set program, multi steps and check history.

#### Information

Touch a part of [ 1] to check main/display board version, brand and model name.



#### Settings

### **Setting Time and At Set Speed**

Touch a part of [TIME].
To 99 hr. 59 min. 59 sec. or Continuous (00:00:00)

At Set Speed ON / OFF
ON: At Set Speed / OFF: Normal

#### **Actual Temperature**

### **Setting Temperature**

Touch a part of [TEMP]. -20°C to 40°C

#### **Fast Cool**

Touch a part of [FAST COOL] for fast temp function.

#### **Actual Status**

During "RUNNING" period, the actual speed (RPM) with g-force and remaining time are shown numerically and graphically.

## Start / Stop

Start / Stop operation

### Open Door

Touch a part of [OPEN DOOR] to open the lid of centrifuge.

## Operation

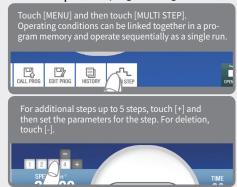
### **Function Selection**



### Fast Cool (Quick Temperature Down)



### Multi Steps (Shift programming function)



### **PROG Save**

	001 PCP.	25110 %	ne 391.50	en type o	-	op 4 acc			F 4-250-A
1	2	3	4	5	6	7	8	9	0
Q	W	Е	R	Т	Y	U	1	0	Р
A	S	D	F	G	н	J	K	L	+
z	Х	С	٧	В	N	М		-	CLEAR

#### PROG Call

*			Cal	I Pro				
Pro	gram Lis	1						Touch [MENU] a
	me: E.COLI 000 RCF: 250			ser: LAB ormal tem	x 4 ages		time: 02 Feb 14 06:24 pm stor: GRF-L-250-6	then touch
	INE: DNA P			ier: LAB the set RPs	d temp		time: 22 Feb 14 12:24 pm lec: 9 r otor: QRF-L-250-8	[CALL PROG].
03 na	rtec	seet				finec		
RPM:	RCF:	time:	type:	temp:	800:	dec	retor	Select the call
04 na	name: user		er:			time:		
FPM:	BOF:	time:	type:	temp:	800	dec	rotor	program and th
06 na	me:		U	ier:			time:	
	BCP:	time	type:	temp:	800	dec	rotor	touch [OK].

#### Start

Cat. No. GZ-2236R



#### Stop





# Quick Guide



# Refrigerated, Large Capacity, High-Speed Centrifuge

2236R

#### **Precautions for Use**



#### **Electricity requirement**

The 2236R requires 4K VA for optimal operation. Therefore, should secure sufficient power inflow in single phase current. The supplied Power Cord and Plug should make proper current connection with the supplied Wall Outlet Socket.



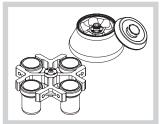
### Balance for centrifuge & rotor

When centrifuge is installed, check the horizontality by a Bubble Leveler. Try to locate all bubbles in the center of the Bubble Leveler with rotating the red gear which is in the casters of the centrifuge.



### Connection of drainage tubing

The valve-type drainage tubing supplied to deplete unnecessarily condensed water from the chamber must be connected to the centrifuge and closed completely before starting operation. The valve closure is important for the efficient refrigeration. Connect the two supplied Drain V/V, and then close the valve. Connect the hose to the joint hole at the left bottom of the centrifuge.



# Checking accessories for damage

Inspect the rotor and accessories for damage before each use. Discontinue use and replace it if damaged.



#### Balancing the rotor

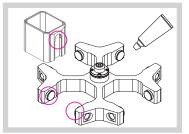
Load the sample symmetrically.

## **Maintenance Tips**



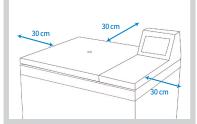
# Take care of the heavy rotors and keep the lid open after every use

GRF-L-1000-6, GRF-L-1000-4 and GRF-L-500-6 are very heavy, so hold the lifting handle of the rotos well and carefully put the rotor in the chamber of 2236R. Take the rotor out after use and clean the shaft with the dry soft cloth. Keep the centrifuge dry for prolonged durability.



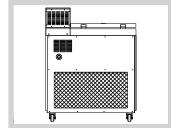
## Lubricate the contact area

Clean rotor pivots and bucket grooves. Lubricate them by coating the grease sometimes to swing the buckets enough.



## Secure a safety zone or 30 cm around centrifuge

Position the centrifuge with enough space (30 cm) on each side of centrifuge to ensure proper air circulation and safety zone.



# Check ventilation slits regularly

Make sure that there is no dirt/ dust on the ventilation slits of the device, and remove it if any.



# Shut down power after operation

Switch off the device and disconnect the power plug after using the centrifuge.

