3. Close the lid & flip ON the front switch to start centrifugation.
4. Once the centrifugation is completed, turn the front switch to "Off" to gradually stop the rotor.
5. After the rotor has stopped, press the lid release button and open the lid with your thumb in front and fingers on the top - simply lift the lid back on the hinge.
6. If you want to stop the centrifuge quickly, push the lid release button and the rotor will stop within a few seconds.

In the following pages the routine centrifuge operation procedures are explained in brief.

12. WARRANTY STATEMENT

This product is warranted to be free from defects in material and workmanship for a period of two (2) years from date of purchase. Your product will be duly repaired upon prompt notification in compliance with the following conditions :

This warranty is valid only if the product is used for its intended purpose and within the guidelines specified in this instruction manual. This warranty does not cover damage caused by accident, neglect, misuse, improper service, natural forces or other causes not arising from defects in original material or workmanship. This warranty does not cover any incidental or consequential damages, commercial loss or any other damages from the use of this product.

The warranty is invalidated by any non-factory modification, which will immediately terminate all liabilities on us for the products or damages caused by its use. The customer shall be responsible for the product or use of products as well as any supervision required for safety. If requested the products must be returned to the distributor in well packed and insured manner and all shipping charges must be paid.

Note: Some states do not allow limitation on the length of implied warranties or the exclusion or limitation of incidental or consequential damages. This warranty gives you specific legal rights. This warranty is given expressly in lieu of all other warranties, expressed or implied.

The purchaser agrees that there is no warranty of merchantability or of fitness for any intended purpose and that there are no other remedies or warranties, expressed or implied, which extend beyond the description on the face of the agreement. This warranty is only applicable to the original purchaser.

Products received without proper authorization will not be processed for warranty or service. All items returned for service should be sent with postage prepaid in the original packaging or other suitable packaging, padded to avoid damage. We will not be responsible for damage incurred by improper packaging.

Note: This warranty is valid only if the warranty is registered with the supplier within 30 days from the date of purchase.

For your reference, make a note of the serial number, date of purchase and supplier here.	
Serial No.	Purchase Date
Supplier	

13. PRODUCT DISPOSAL

In case the product is to be disposed of, the relevant legal regulations are to be observed.

Information on the disposal of electrical and electronic devices in the European Community

The disposal of electrical devices is regulated within the European Community by national regulations based on EU Directive 2012/19/EU on waste electrical and electronic equipment (WEEE). According to these regulations, any devices supplied after 13.06.05 in the business to business sphere, to which this product is assigned, may no longer be disposed off in municipal or domestic waste. They are marked with the following symbol to indicate this.



As disposal regulations within the EU may vary from country to coe contact your supplier if necessary.untry, pleas

CE

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0108-01-0000-02-003-R0



CR-68

PRODUCT USER MANUAL

1. INTRODUCTION

This Micro Centrifuge offers versatility, simplicity, safety, and ease of usage in a single package. This product has been designed after studying centrifuges and its usage in numerous scenarios of the lab environment.

This Micro centrifuge is specially suitable for microfiltration, cell separations, centrifugal tube sedimentation, and spin down applications. Please read this manual thoroughly before operating the centrifuge.

2. INTENDED USE

This is used in various laboratories to separate particles from suspension or even macromolecules from solutions according to their density. The different biological substances that are usually separated by centrifugation are microbial cells, organelles, proteins, DNA, and RNA.

Note: This user guide is intended to assist with the operation and care of the unit only and not for its repair. The customer should not attempt to service or repair the unit. If repairs are required, please contact the supplier.

3. FEATURES

- 8 position micro centrifuge tube rotor
- Electronic safety brake on lid opening for user safety
- Magnetic rotor for easy tool free changing of rotor
- Starts and stops in seconds
- Lid safety interlock
- Smooth and silent, discreet running
- Small footprint can be fit in hoods & small work places
- Interchangeable magnetic rotors (MCT rotor & PCR rotor)
- Low voltage power consuming device

4. STANDARD ACCESSORIES

1.5/2ml closed rotor, PCR strip rotor

Individual adaptor for 0.5 ml tubes, pack of 8

Individual adaptor for 0.1/ 0.2 ml tubes, pack of 8

Power Adaptor: Input voltage - 100 - 240VAC 50/60Hz

Output voltage: 24V ⎓ 1.5A

Product User Manual, Warranty Card and Declaration Conformity

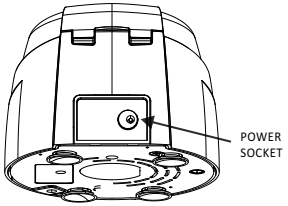
5. TECHNICAL SPECIFICATIONS

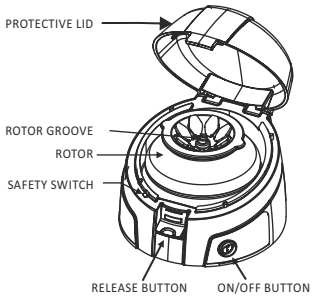
Motor Type	DC Motor
Rotor Capacity	8 x 1.5 /2.0 ml Tube Rotor & 2 Place PCR Strip Rotor
Speed	6000 RPM
	2000 x g (MAX RCF)
Speed Accuracy	± 300 RPM
Time	NO
Size (W X D X H)	162 x 157 x 116 mm
Weight	1.1 kg
Input Voltage	24V ⎓ 0.4 A
Power Consumption	10 W

6. SAFETY PRECAUTIONS

- The personal micro centrifuge is designed to be safe under the following conditions when operated with necessary precautions mentioned below :
- Indoor use only.
- Ambient temperature of 4°C to 45°C.
- Main supply voltage fluctuations not to exceed +/- 10% of the nominal voltage.
- Position at least 20 cm from walls, 20 cm from ceiling and 20 cm between other products.
- Make sure the rotor is placed in the shaft groove properly. If the rotor is not installed properly, the machine will make noise, turn off the machine & install the rotor as instructed for fitment of the rotor.
- Always load the rotor symmetrically. Each tube should be counterbalanced by another tube.
- Make sure to always use only specified micro centrifuge tubes made from plastic and designed to withstand centrifugal forces of at least 2000 g.
- Do not operate the centrifuge without the rotor being properly attached to the shaft. Re-check by trying to pull it up manually, especially after the rotor has been changed or re-assembled.
- Do not move the centrifuge while it's under operation.
- Do not fill the tubes while they are in the rotor. Liquid spillage may harm the unit.
- Do not put hands in the rotor chamber unless the rotor has completely stopped.
- Do not centrifuge flammable, explosive or corrosive materials.
- Do not use solvents or flammable media near this or other electrical equipment.
- In case the unit is dropped from the table, please check the casing for any cracks/damage.
- The centrifuge and its components are non autocleavable.
- Do not use the centrifuge in any manner not specified in these instructions.

7. INSTALLATION





This micro centrifuge is supplied in a packaging box. Open the box, then gently remove the centrifuge from the box and plug in the power adaptor pin before connecting to the main power source. The instruction manual and the accessories should be kept with the centrifuge. Please keep all packaging in safe storage for at least 2 years for warranty purposes.

Make sure the rotor is tight to avoid any accident. Load the rotor with the micro tubes for centrifugation. Place the ON/OFF switch to "o" front and close the lid to start centrifugation.

For more clarification refer to the RCF chart below:-

RCF CHART (FIXED)					
RPM	ROUND ROTOR				PCR STRIP
	0.2 ml	0.5 ml	1.5 ml	2 ml	0.2 ml
3000	319	424	468	488	467
4500	718	953	1053	1098	1050
6000	**1276**	**1695**	**1872**	**1952**	**1868**

8. ROTOR BALANCING

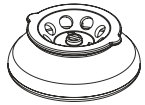
1. Always balance the rotor before centrifugation. The following are symmetrical loadings of centrifuge tubes to the rotor.



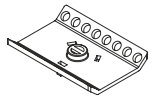
2. Ensure that the samples in the tubes are of equal volume.
3. Symmetrical loading of tubes in the rotor is necessary, otherwise vibration can occur which can cause serious damage to the centrifuge.
4. The following are the incorrect methods of loading tubes in the centrifuge the rotor.
5. The following are the incorrect methods of loading tubes in the centrifuge the rotor.



9. INTERCHANGEABLE ROTOR



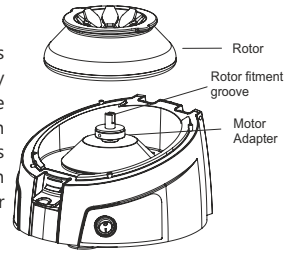
ROTOR_8 SLOT
8 x 0.2,0.4,0.5,1.5,2 ml



PCR ROTOR
16 x 0.2 ml

10. CHANGING THE ROTOR

This centrifuge feature magnetic rotors. Thus changing the rotors can be done without any tool. The rotors fit on the central shaft of the motor through magnet situated at the both the rotors (MCT & PCR rotor). The rotor fits through snap to the central shafts through gentle guidance into the groove on the rotor adapter .



11. OPERATION

To operate the micro centrifuge, the below steps should be followed:

1. Connect the power adaptor & Switch 'On' from the front side.
2. Load the rotor symmetrically to avoid accidents and damage to the centrifuge.