

Microcentrifuge 6000 rpm



AHN myLab MC-01



Instruction Manual

CONTENTS

1.	Introduction	1
2.	Intended Use	1
3.	Features	2
4.	Technical Specifications	2
5.	Standard Accessories	3
6.	Safety Precautions	3
7.	Installation	5
8.	Standard Part Listing	6
9.	Rotor Balancing	6
10.	Interchangeable Rotor	8
11.	Changing the Rotor	8
12.	Opening Centrifuge Lid	9
13.	Operation	10
14.	Calibration	11
15.	Care and Maintenance	11
16.	Service and Repair Information	12
17.	Warranty Statement	12
18.	Product Disposal	14

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.

For your reference, make a note of the serial number, date of purchase and supplier here.

Serial No.

Purchase Date

Supplier

3. FEATURES

- 8 position closed microtube rotor
- Electronic safety brake on lid opening for user safety
- Digital display
- Starts and stops in seconds
- Easy access of the on/off switch
- Lid safety interlock
- Smooth and silent, discreet running
- User calibration feature
- Small footprint; can fit easily on to a crowded countertop
- Interchangeable rotors
- Low voltage power consumption

4. TECHNICAL SPECIFICATIONS

MAXIMUM SPEED	6000 RPM
SPEED TYPE	Fixed speed 6000 RPM
MAX RCF	2000 x g
SPEED ACCURACY	±100 RPM
SIZE (LxWxH)	162 x 154 x 116 mm
WEIGHT	1.1 Kg
INPUT VOLTAGE	100 - 240 VAC, 50/ 60 Hz
OUTPUT VOLTAGE	24VDC, 1.5A
POWER CONSUMPTION	15 W
OPERATING CONDITIONS	Works in 80% humidity and in temperature of 40°C

5. STANDARD ACCESSORIES

- 1.5/2ml closed rotor
- PCR strip rotor
- Allen wrench
- Individual adaptor for 0.4/0.5 ml tubes, pack of 8
- Individual adaptor for 0.2 ml tubes, pack of 8
- External power adaptor
- Product User Manual, Warranty Card and Declaration Conformity

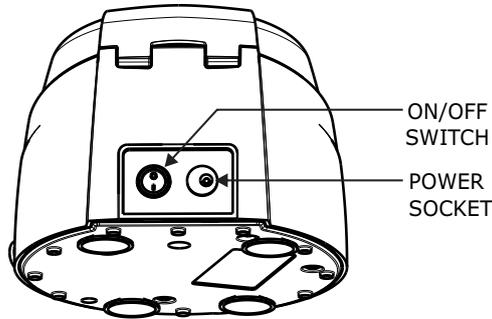
6. SAFETY PRECAUTIONS

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 65°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 to always install the centrifuge on stable flat surfaces only & place it near the electrical outlet.
- 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



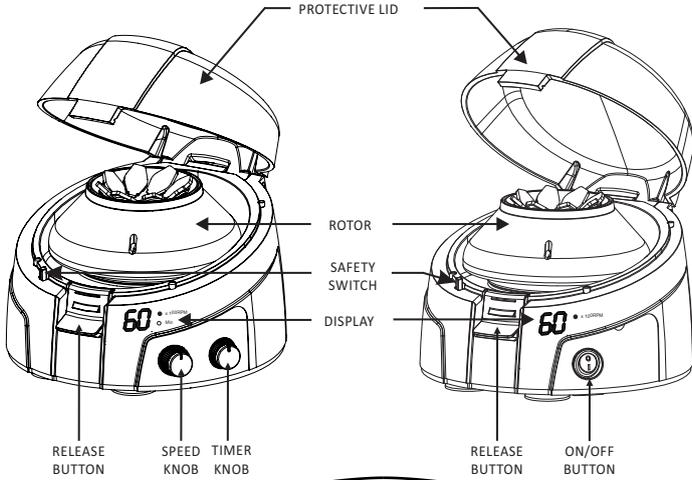
This micro centrifuge is supplied in a packaging box. Open the box, then gently remove the centrifuge from the box and plug in the power adaptor pin before connecting to the main power source. The instruction manual and the accessories should be kept with the centrifuge. Please keep all packaging in 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”, rear, set the desired speed and time, and close the lid to start centrifugation.

For more clarification refer to the RCF chart below:-

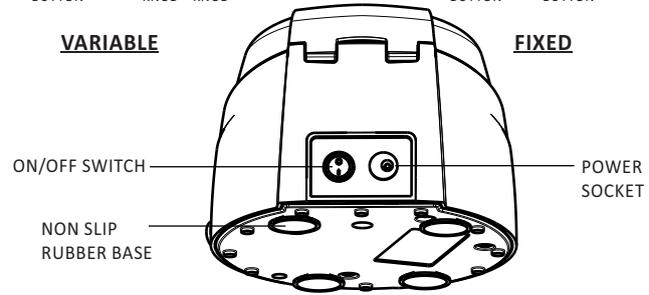
RCF CHART (FIXED)					
RPM	ROUND ROTOR				PCR STRIP
	0.2 ml	0.5 ml	1.5 ml	2 ml	0.2 ml
3000	319	424	468	488	467
4500	718	953	1053	1098	1050
6000	1276	1695	1872	1952	1868

8. STANDARD PARTS LISTING



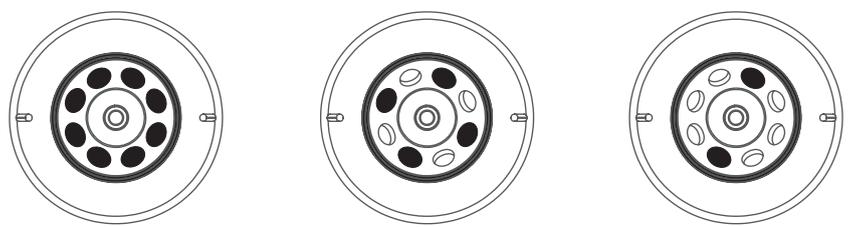
VARIABLE

FIXED



9. ROTOR BALANCING

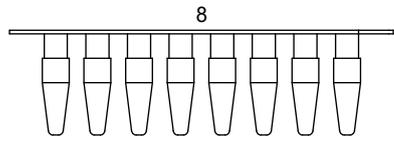
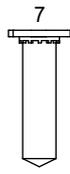
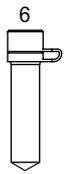
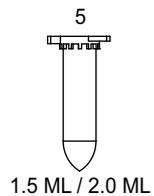
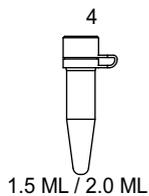
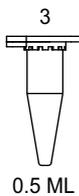
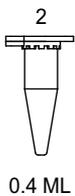
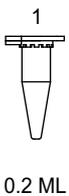
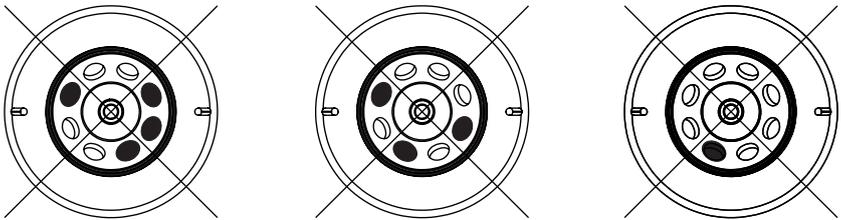
1. Always balance the rotor before centrifugation. The following are symmetrical loadings of centrifuge tubes to the rotor.



- 2. Ensure that the samples in the tubes are of equal volume.
- 3. Symmetrical loading of tubes in the rotor is necessary, otherwise

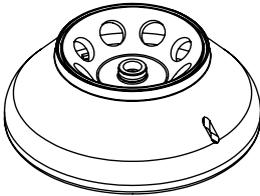
vibration can occur which can cause serious damage to the centrifuge.

- 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.

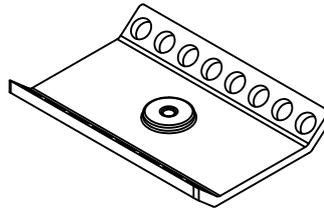


8 Different types of test tubes can be centrifuged by using two interchangeable rotors

10. INTERCHANGEABLE ROTOR



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

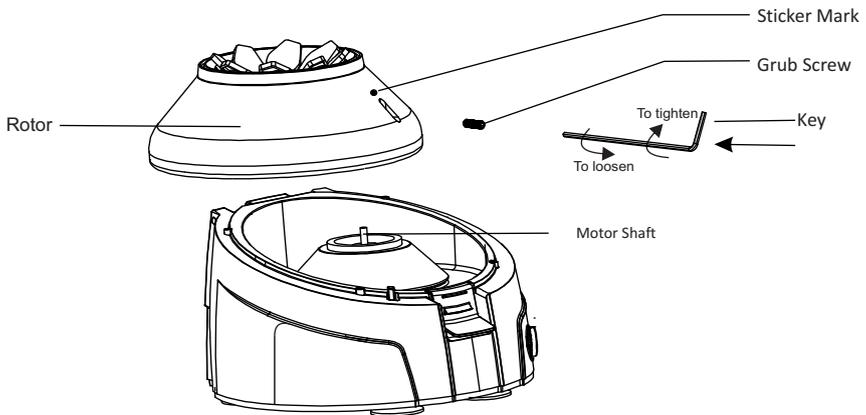


PCR ROTOR
16 x 0.2 ml

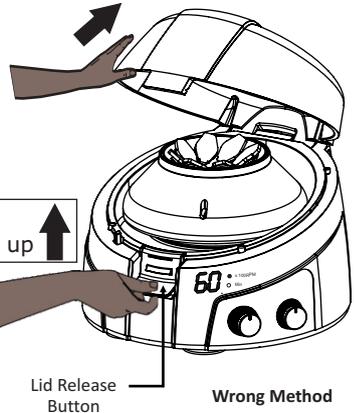
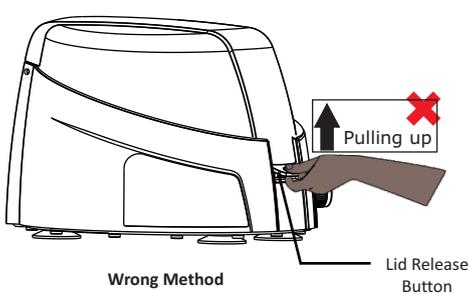
11. CHANGING THE ROTOR

Insert the hexagonal allen key into the marked hole provided on the side of the rotor. The grub screw is located at the bottom of the rotor on the marked side. To remove the rotor, turn counter - clockwise to loosen the screw and then gently pull the rotor up vertically. Insert the new rotor from the top onto the motor shaft and tighten the screw again. Turn clockwise to tighten the screw which is located under the bottom of rotor. Please check that the rotor is tight enough to avoid any accidents.

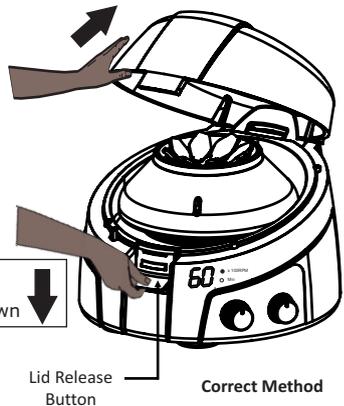
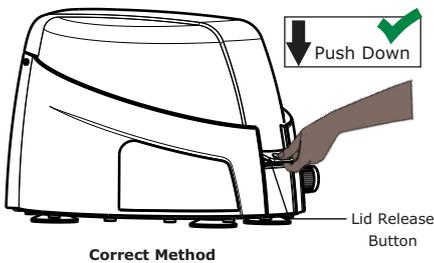
Note: Tightening the screw will be in clockwise direction and the loosening will be in counter - clockwise direction



12. OPENING CENTRIFUGE LID



Trying to open the centrifuge lid by pulling the “Lid Release” button up is the wrong method of opening the lid. Pulling the “Lid Release” button up will break the button or damage the button.



To open the centrifuge lid, press the “Lid Release” button down.

13. OPERATION

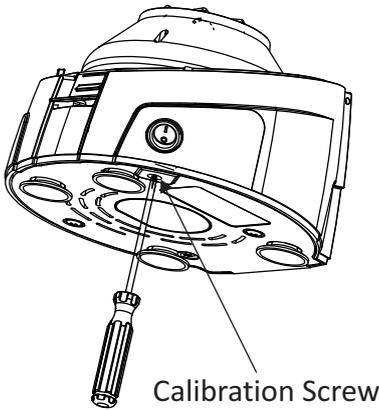
To operate the micro centrifuge, the below steps should be followed:

1. Connect the power adaptor & Switch 'On' from the rear side so that the display will show you the fix RPM readings.
2. Load the rotor symmetrically to avoid accidents and damage to the centrifuge.
4. Close the lid & flip ON the front switch to start centrifugation.
5. Once the centrifugation is completed, turn the front switch to "Off" to gradually stop the rotor.
6. 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.
7. 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.

14. CALIBRATION (FIXED)

The unit comes factory calibrated. However, if the user wishes to calibrate for specific loads, the rotors with any given load can be calibrated to achieve displayed speed by using the external optical tachometer and using the calibration screw at the bottom of the centrifuge. The calibration screw is inside the base plate which is seen from the small hole in base plate.



To calibrate, close the lid and run the centrifuge. Align the tachometer to get the speed, turn the screw either to increase or decrease the speed. Continue the procedure until the tachometer speed matches the speed displayed on the centrifuge.

15. CARE & MAINTENANCE

This personal centrifuge and its rotor should be cleaned periodically. Ensure that while cleaning the unit, it is not plugged in to the main power supply. To clean the Oxford centrifuge, use a damp cloth and a mild, noncorrosive detergent (ph < 8). Do not immerse the centrifuge in liquid or pour liquid over it. Excessive amounts of liquid should be avoided, liquid should not come into contact with the motor. After cleaning, ensure all parts are dried thoroughly before attempting to

operate the unit.

Should a spill of infectious materials occur within the rotor or rotor chamber, the unit should be disinfected. This should be performed by qualified personnel with proper protective equipment. Do not use any cleaning or decontamination methods except those recommended by the manufacturer. Check with the manufacturer that the proposed method will not damage the equipment.

16. SERVICE AND REPAIR INFORMATION

⚠ WARNING : Repairs performed by unauthorized personnel may void the warranty. Any required service should be performed by authorized, qualified personnel only.

In event of repairing/warranty claims - before sending the personal centrifuge unit for repairs/warranty claims, obtain a service request number based on your product serial number from either Lab Products or through the authorized supplier. When returning a unit to Lab Products for service, it should be sent in the original packaging. If this is not possible, be sure that the unit is sufficiently packed. Any damage resulting from improper packaging is the responsibility of the customer. Obtain a service request number and send the unit along with the service request number. A written explanation/repair requirement note should accompany the unit along with the service request number.

17. 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.

18. 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 country, please contact your supplier if necessary.



Uthleber Weg 14
D-99734 Nordhausen
Germany

Tel.: +49(0)3631/46594-04
Fax: +49(0)3631/46594-10

E-Mail: info@ahn-bio.de
Web: www.ahn-bio.de

0102-97-M-R0

