

## 11. OPERATION

To operate the centrifuge, take the following steps:

1. Connect the power adaptor to the power socket on the back of the centrifuge.
2. Load the rotor symmetrically to avoid accidents and damage to the centrifuge.
3. Close the lid and turn on the power switch on the back of the centrifuge.
4. Rotate\* the speed knob to set the speed between 1000-6000 RPM (displays as two digits [x100 for conversion]).
5. Rotate\* the time knob to set the time from 1-25 and infinite mins.
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 need to stop the centrifuge quickly, push the lid release button and the rotor will stop within a few seconds.

**\*NOTE:** To increase, rotate the knob clockwise. To decrease, rotate the knob counterclockwise.

## 12. MAINTENANCE AND CLEANING

The centrifuge and its rotor should be cleaned periodically. Before cleaning, ensure that the centrifuge is not plugged into the main power supply. To clean the centrifuge, use a damp cloth and a mild, non-corrosive detergent. Do not immerse the centrifuge in liquid or pour liquids 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 operating the centrifuge.

If infectious materials leak/spill into 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 Woodley Equipment Company. Contact Woodley Equipment Company if you need more information or guidance.

## 13. WARRANTY

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

This warranty is only valid if the product is used for its intended purpose and within the guidelines specified in this user manual. This warranty does not cover damage caused by accident, neglect, misuse, improper service, natural forces or other cause 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 Woodley Equipment Company 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 product must be returned to the manufacturer. It must be well packed, insured and all shipping charges must be paid.

**NOTE:** Some states do not allow limitation on the length of implied warranties or the exclusion of limitation 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, express 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 authorisation 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. Woodley Equipment Company will not be responsible for damage incurred by improper packaging.

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

## 14. 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 of 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 Woodley Equipment Company if necessary.

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# Clinispin™ Mini USER MANUAL



**WOODLEY**  
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## 1. INTRODUCTION

The Clinispin Mini offers versatility, simplicity, safety and ease of use in a single centrifuge. This product has been designed after studying centrifuges and their uses in numerous scenarios in the lab environment.

The Clinispin Mini is suitable for microfiltration, cell separation, centrifugal tube sedimentation and spin down applications. Please read this manual thoroughly before operating the centrifuge.

## 2. INTENDED USE

The Clinispin Mini is designed to separate, sediment, and spin down aqueous solutions and solvent suspensions of differing densities in compatible sample containers.

**NOTE:** Before using the centrifuge, please read this user manual carefully. This user manual is intended to assist with the operation and care of the unit, and is not a document which aids in repair. For repairs, please contact Woodley Equipment Company.


## 3. FEATURES

- 8 position mini centrifuge tube rotor
- Digital display with microprocessor control
- Set variable speed and timer
- 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 fit in small workplaces
- Interchangeable magnetic rotors (MCT rotor and PCR rotor)
- Low voltage power consuming device

## 4. STANDARD ACCESSORIES

- 1.5/2ml rotor
- PCR strip rotor
- Power adapter
- Individual adapter for 0.5ml tubes (pack of 8)
- Individual adapter for 0.1/0.2ml tubes (pack of 8)
- User manual
- Warranty card
- Declaration of conformity

## 5. TECHNICAL SPECIFICATIONS

<b>Motor Type</b>	Brushless DC Motor
<b>Rotor Capacity</b>	8 x 1.5/2.0ml Tube Rotor & 2 Place PCR Strip Rotor
<b>Speed</b>	1000-6000 RPM 2000 xg (Max. RCF)
<b>Speed Accuracy</b>	±2% RPM
<b>Run Time &amp; Mode</b>	1-25 mins & infinite mode
<b>Dimensions</b>	162 (W) x 157 (D) x 116 (H) mm
<b>Weight</b>	1.1kg
<b>Power Adapter</b>	Input: 100-240 VAC, 50/60 Hz Output: 24V  1.5A
<b>Power Consumption</b>	15W
<b>Permissible Relative Humidity</b>	≤80%
<b>Ambient Temperature</b>	+5°C to +40°C

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<b>Altitude</b>	Use up to an altitude of 2000m above MSL (mean sea level)
<b>Pollution Degree</b>	2
<b>Environment</b>	For indoor use only

## 6. SAFETY PRECAUTIONS

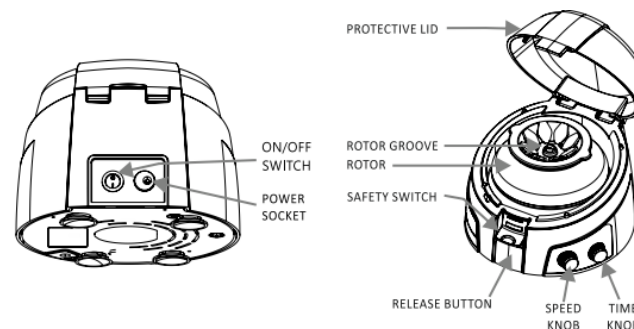


Read all safety and usage information provided in this manual carefully before using the centrifuge.

The Clinispin Mini is designed to be safe under the following conditions when operated with the necessary precautions mentioned below:

- Indoor use only. Only install the centrifuge on a flat, level surface and place it near the power outlet.
- Ambient temperature of +4°C to +45°C.
- Main supply voltage fluctuations should not exceed ±10% of the nominal voltage.
- Position the centrifuge so there is at least 20cm of space on all sides.
- Make sure the rotor is placed in the shaft groove properly. If the rotor is not installed properly, the machine will make an abnormal noise. Turn the centrifuge off and install the rotor as instructed.
- Always load the rotor symmetrically. Each tube should be counterbalanced by another tube.
- Only use the specified centrifuge tubes (made from plastic and designed to withstand centrifugal forces of at least 2000g).
- Do not operate the centrifuge without the rotor being properly attached to the shaft. Check it is properly attached by trying to pull it up manually, especially after the rotor has been changed or reassembled.
- 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 centrifuge.
- Do not touch the rotor chamber until the rotor has completely stopped.
- Do not centrifuge flammable, explosive or corrosive materials.
- Do not use solvents or flammable media near the centrifuge.
- If the centrifuge is dropped, please check the casing for any cracks/damage.
- Do not use the centrifuge in any manner not specified in this user manual.
- Use mild soap solution to clean and disinfect the centrifuge. Do not use sanitiser/IPA solutions.

## 7. INSTALLATION



The Clinispin Mini is supplied in a packaging box.

Open the box. Then, gently remove the centrifuge from the box and plug in the power adapter pin before connecting to the main power source.

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The user 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 accidents. Load the rotor with the micro tubes for centrifugation. Place the ON/OFF switch to 'o' on the back of the centrifuge and close the lid to start centrifugation.

For more clarification, refer to the RCF chart below:

RPM	RCF Chart (Fixed)				
	Round Rotor				PCR Strip
	0.2ml	0.5ml	1.5ml	2ml	0.2ml
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.



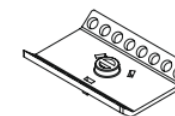
2. Ensure that the samples in the tubes are of equal volumes.
3. Symmetrical loading of tubes in the rotor is necessary. Otherwise, vibration can occur which can cause serious damage to the centrifuge.
4. The following are incorrect methods of loading tubes in the centrifuge rotor.



## 9. INTERCHANGEABLE ROTOR



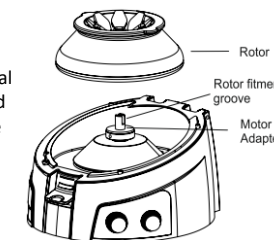
8 Slot Magnetic Rotor  
8 x 0.2,0.4,0.5,1.5,2 ml



PCR Magnetic Rotor  
16 x 0.2 ml

## 10. CHANGING THE ROTOR

The Clinispin Mini features magnetic rotors. Therefore, changing the rotors can be done without any tools. The rotors fit on the central shaft of the motor through a magnet situated on both of the rotors (MCT & PCR rotor). The rotor fits to the central shaft through gentle guidance into the groove on the rotor adapter. You should hear a 'snap' when fitted correctly.



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