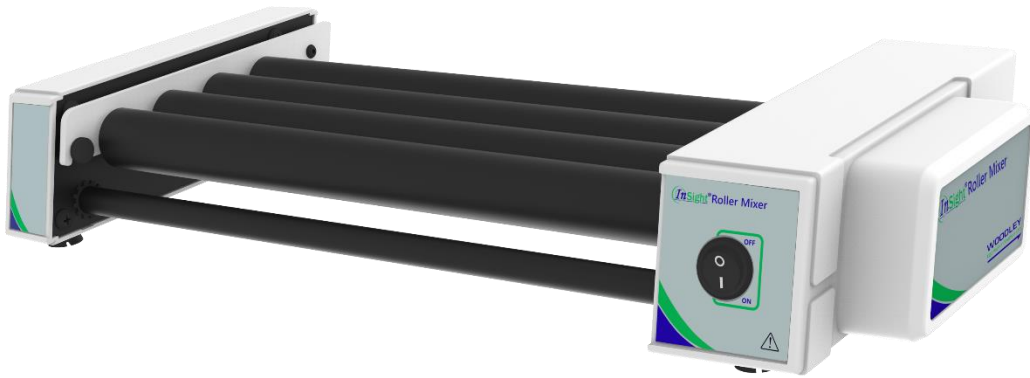


# *InSight*<sup>®</sup> Roller Mixer

## Operator's Manual



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# 1. Product Description

## 1.1 Introduction

This manual provides important safety information for the InSight Roller Mixer. It should be kept near the equipment for quick and easy reference. The rolling motion also provides gentle rocking for thorough mixing. The removable rollers can be set to suit tubes and bottles of different diameters. The rollers can be easily removed and replaced for cleaning.

## 1.2 Intended Use

The InSight Roller Mixer is intended for use in laboratories for mixing blood samples, viscous substances and for liquid-solid suspensions.

## 1.3 Standard Accessories

- Power cord
- Operator's manual
- Warranty card
- Lubricant bottle

***NOTE:** Before using the instrument, please read this operator's manual carefully. This operator's manual is intended to assist with the operation and care of the unit only and not its repair. For repair, please contact Woodley Equipment Company.*

## 1.4 Features

- Gentle rocking and rolling motion for optimum mixing
- Fixed speed of 30 RPM with speed accuracy of +/-2 RPM
- Continuous/infinite mode of operation
- Tilt angle of +/- 3°
- Tool free removal/installation of rollers for replacement and cleaning
- Adjustable rollers spacing to hold different diameter tubes
- Suitable for mixing of blood samples, viscous substances and for liquid-solid suspensions
- Small footprint saving laboratory space
- Works with 80% humidity and 40°C
- Protection class of IP 21
- Robust construction for stable operation

## 1.5 Technical Specifications

<b>Motor Type</b>	AC Synchronous Motor
<b>Number of Tube Rollers</b>	4 Rollers
<b>Rocking Motion</b>	Rocking & Rolling
<b>Speed Range</b>	Fixed 30 RPM
<b>Speed Accuracy</b>	± 2 RPM
<b>Timer Range</b>	Continuous mode
<b>Tilt Angle</b>	+/- 3°
<b>Max. Loading Capacity</b>	1.5kg
<b>Removable Rollers</b>	Yes
<b>Roller Size</b>	330mm length x 30mm diameter
<b>Dimensions</b>	475 x 210 x 80 mm
<b>Protection Class</b>	IP 21
<b>Permissible Ambient Temperature</b>	5°C - 40°C
<b>Permissible Relative Moisture</b>	<80%
<b>Weight</b>	1.5kg
<b>Input Voltage</b>	110 - 220V 0.02A
<b>Power Consumption</b>	3W (110V), 6W (220V)

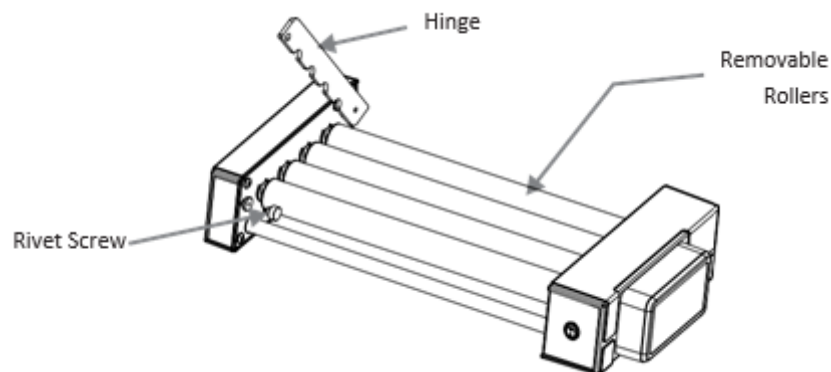
## 2. Safety Precautions

- Never use the instrument in any manner not specified in this manual.
- Equipment used in any manner not specified in this manual or by Woodley Equipment Company might result in the lapse of warranty.
- Do not try to stop the roller by blocking/holding it. Do not attempt to remove rollers during operation.
- Do not move the instrument while it's operating or connected to the main power supply.
- Repairs must only be performed by Woodley Equipment Company authorised personnel.
- Only use recommended original spare parts for best results and product safety.
- If liquids are spilled on the roller, the instrument must be cleaned carefully and properly before being used again.
- Prior to mixing, the tubes should be visually inspected for material damage.
- Damaged tubes must not be used as this can result in sample loss and contamination of the product.
- The maximum capacity of 1.5kg must not be exceeded.
- This product must be used for specified applications only. It must not be operated in a hazardous or flammable environment and must not be used to mix explosive or highly reactive substances.
- Do not place potentially hazardous material within the clearance area/envelope.
- Wear personal protective equipment in accordance with the hazards category of the medium to be processed. There is risk of liquid splashing.
- Place the instrument on a flat, levelled and solid surface. Make sure the feet of the instrument are clean and undamaged.
- Load the tubes safely between the rollers. Always distribute the samples evenly on the device.

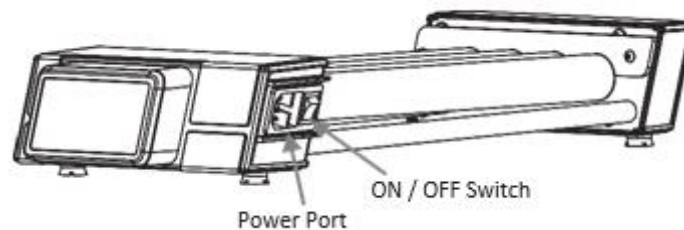
- Ensure that the hinges are properly locked by rotating screws clockwise before operating the device.
- Do not apply any pressure to the hinges. They should only be used for locking and unlocking rollers.
- Ensure that only closed tubes are used for mixing and rolling.
- Do not lean on the equipment. It may damage the equipment or harm the operator.
- Do not fill tubes near the device. Liquid spillage may harm the device.
- In the event of contamination caused by aggressive agents, the device must be cleaned immediately using a natural cleaning liquid or refer to the MSDS (Material Safety Data Sheet) of the chemical for more information. If damage occurs, contact Woodley Equipment Company.
- The power adaptor supplied with the unit is designed to be used for this particular unit. Do not use any other power adaptor.
- Only process media which will not react dangerously to the extra energy produced by mixing.
- Do not operate the appliance in an explosive atmosphere with hazardous substance or under water.

### 3. Standard Parts Listing

#### Front



#### Rear



## 4. Installation

Gently remove the upper packaging and take out the InSight Roller Mixer by holding it from the bottom. When this equipment is used for the first time, ensure that all the packaging accessories are removed from the product. Please keep all the packaging in safe storage for at least 2 years for warranty purposes.

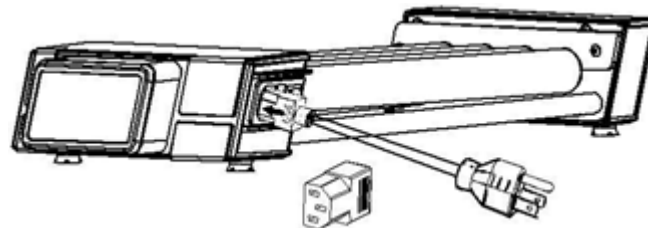
### 4.1 Location and Mounting

Place the device on a flat, level surface and ensure that all four feet stand on the surface firmly. Avoid installing on a slippery surface or surface prone to vibration.

1. Ideal ambient temperature is  $20^{\circ}\text{C} \pm 5^{\circ}\text{C}$ . Avoid placing the device in direct sunlight.
2. Keep clearance of at least at least 30 cm from all sides to guarantee cooling efficiency.
3. Keep away from heat or water to avoid sample temperature issues.
4. Do not place the device in a place where it could become difficult to operate.

### 4.2 Connecting Power Adaptor

1. Connect one side of the power adaptor to the rear side of the InSight Roller Mixer and the other to the power supply as shown in the figure below.
2. Ensure the power switch is OFF while connecting the power adaptor.



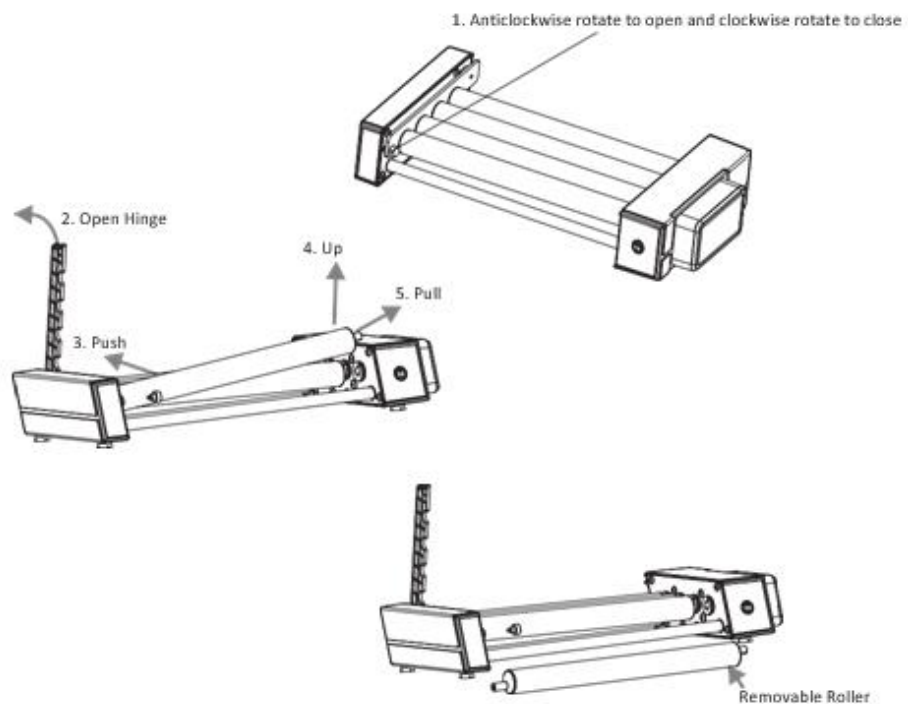
## 5. Removing and Installing Rollers

### 5.1 Removing Rollers

Device rollers can be removed/changed by a simple push up and pull process. Open the hinge as shown in the image below and then remove the rollers.

1. Unscrew the hinge by rotating the rivet counter clockwise.
2. Open the hinge.
3. Push the roller gently on the hinge side.
4. Pull the roller up.
5. Pull the roller out of the side opposite to the hinge.

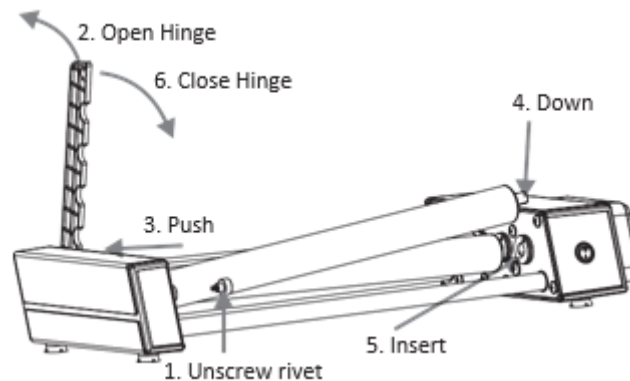
The image below shows the process to remove the rollers.



Ensure the rollers are removed in order. Remove the 1<sup>st</sup> roller then the 2<sup>nd</sup> roller and so on.

## 5.2 Installing Rotors

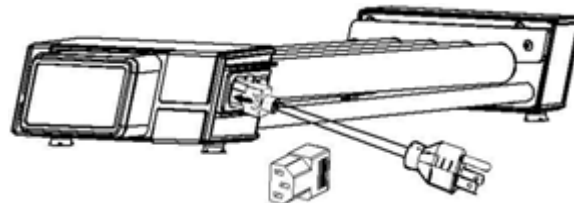
Follow the exact reverse process to insert the rollers back into the tube roller. The image below shows the step-by-step procedure to insert the rollers back into the unit.



## 6. Operation

### 6.1 Switch on the Device

After connecting the power adaptor to the rear of the device, switch ON the main power supply, then switch ON the device from the rear. Make sure that the tubes are evenly distributed before use. Do not start the device if the hinge is open.



### 6.2 Start/Stop Operation

Once all the pre-requisite procedures are done, switch on the main power supply to START the operation. Speed gradually increases from 0 RPM to 30 RPM. This equipment runs on continuous mode (for infinite time).

**NOTE:** There is no provision to change Speed in this equipment.

## 7. Maintenance and Cleaning

Before cleaning, switch off the device and disconnect the power cord.

### 7.1 Outside of the Device

1. Clean the outside of the device with a soft and dry cloth.
2. Do not spray cleanser into the device when cleaning.
3. Wear protective gloves when cleaning the device.
4. Maintenance should be carried out on a monthly basis if the device is used continuously.
5. Use the lubricant oil for maintenance of both sides of the roller.
6. Be careful not to scratch the surface of the device when cleaning it.
7. Do not use a metal scourer.



## 8. Warranty

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 Woodley Equipment Company for the product 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.

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 there are no other remedies or warranties, 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. We will not be responsible for damage incurred by improper packaging.

## 9. Product Disposal

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

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 sector, 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.





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