



# **RR80 and RD80 Rotator Stirrers**

Please read the User Manual carefully before use, and follow all operating and safety instructions!





#### **RR80 and RD80 Rotator Stirrers**

### Preface

Users should read this Manual carefully, follow the instructions and procedures, and beware of all the cautions when using this instrument.

### Service

In order to guarantee this equipment works safely and efficiently, it must have a regular maintenance. In case of any faults, do not try to repair it yourself. If help is needed, you can always contact your dealer or Labbox via **www.labbox.com** 

Please provide the customer care representative with the following information:

- Serial number
- Description of problem
- Your contact information

#### Warranty

This instrument is warranted to be free from defects in materials and workmanship under normal use and service, for a period of 24 months from the date of invoice. The warranty is extended only to the original purchaser. It shall not apply to any product or parts which have been damaged on account of improper installation, improper connections, misuse, accident or abnormal conditions of operation.

For claim under the warranty please contact your supplier.



### 1. Safety Instructions

<ul> <li>Warning!</li> <li>Read the operating instructions carefully before use.</li> <li>Ensure that only trained staff works with the instrument.</li> </ul>
<ul> <li>Protective ground contact!</li> <li>Make sure that socket must be grounded (protective ground contact) before use.</li> </ul>

Table 1

- When working, wear the personal guard to avoid the risk from:
  - Splashing liquids
  - Broken glass containers
- Follow the safety instructions, guidelines and accident prevention regulations.
- Do not touch the running parts, moving instrument care not rolling your fingers.
- Set up the instrument in a spacious area on a stable, clean, non-slip, dry and fireproof surface. Do not operate the instrument in explosive atmospheres, with hazardous substances or under water.
- If the instrument does not run smoothly, please decrease the motor speed.
- Firmly secure the accessories and vessels in place to avoid damage or risk.
- Preparation of samples may lead to dangerous flammable substances. Only process samples that will not react dangerous.
- Use the standard accessories listed in the "accessories" section, and follow the instructions to use accessories to ensure safety. Please switch off the power before assembly of accessories, confirm the instrument and accessories are intact before switch on each time.
- The instrument can only be opened by an expert, please switch off before use.
- The voltage stated on the nameplate must correspond to the mains voltage.
- Do not cover the instrument during running. Prevent the collision and extrusion to instrument and accessories.
- Keep away from high magnetic fields.



### 2. Proper Use

The instrument is designed for mixing in schools, laboratories or factories. This device is not suitable for using in residential areas or other constraints mentioned in Chapter 1.

Not using the accessories recommended by the manufacturer, or failing to use the instructions, may end up causing an unsafe situation.

#### 3. Inspection

#### 3.1. Receiving Inspection

Unpack the equipment carefully and check for any damages which may have arisen during transport. Please contact manufacturer/supplier for technical support.



**Note:** If there is any apparent damage to the system, please do not plug it into the power line.

#### 3.2. Listing of Items

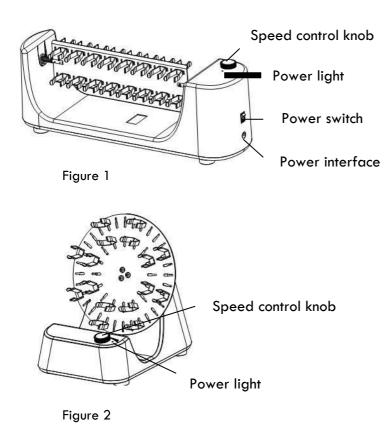
The package includes the following items:

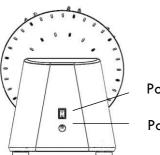
ltems	Qty
Main unit	1
Power cable	1
User Manual	1

Table 2



### 4. Control





Power switch

Power interface

Figure 3

ltems	Descriptions
Speed control knob	Set target speed.
Power switch	Switch ON/OFF instrument.
Power interface	Connect the power cable
Power light	Green LED display light



### 5. Installation

- Install the accessory according following instruction
- Hold the two wings of the clamp, place the hook head in the wide side of the hole, and snap it into the narrow end.

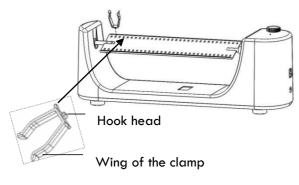
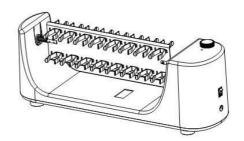
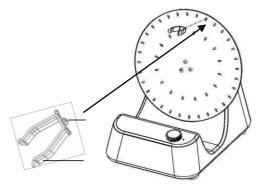


Figure 4













#### 6. Operation

- Place the instrument in safe and stable surface, ensure the required operating voltage and power supply voltage matched, and the socket must be earthed reliably.
- Connect the power cable.
- Install the platform.
- Switch ON the instrument.
- Rotate the speed control knob clockwise to set target speed, and the shaking function will be switched on.
- Rotate the speed control knob to the left-most position to switch off the shaking function.
- Switch OFF the instrument.
- If these operations above are normal, the instrument is ready to operate. If not, the instrument may be damaged during transportation, please contact technical support of manufacturer/supplier.



#### Note:

The speed value can be altered during shaking.



### 7. Maintenance and Cleaning

Proper maintenance can keep instrument working properly and lengthen its lifetime.

- Do not spray cleanser into the instrument when cleaning.
- Do not remove the power line when cleaning. Only use recommended cleansers:

Dyes	Isopropyl alcohol		
Construction materials	Water containing tenside / Isopropyl alcohol		
Cosmetics	Water containing tenside / Isopropyl alcohol		
Foodstuffs	Water containing tenside		
Fuels	Water containing tenside		

Before using other method for cleaning or decontamination, the user must ascertain with the manufacturer that this method will not damage the instrument. Wear the proper protective gloves during cleaning of the instrument.

#### Note:

- Electronic device cannot clean with cleanser.
- If you require maintenance service, must be cleaned the instrument in advance to avoid pollution of hazardous substances, and to send back into original packing.
- If the instrument will not use for a long time, please switch off and place in a dry, clean, room temperature and stable location.

#### 8. Associated standards and regulations

Construction in accordance with the following safety standards: EN 61010-1 UL 3101-1 CAN/CSA C22.2(1010-1) EN 61010-2-10 Construction in accordance with the following EMC standards:

EN 61326-1

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



## 9. Specification

Items	Specifications
P/N	RR80/ RD80
Voltage [VAC]	100-240
Frequency [Hz]	50/60
Motor rating input[W]	16
Motor rating output[W]	10
Motor type	DC motor
Speed range [rpm]	0-80
Shaking motion	Orbital
Dimensions[D×W×H	300×220×310/
mm]	$150 \times 530 \times 190$
Weight[kg]	2.0/1.7
Permissible ambient emperature[°C]	5-40
Permissible relative numidity	80%
Protection class acc.DIN EN60529	IP21

# 10.Ordering information

#### Accessories

Cat. No	Descriptions
MIXS-A15-012	Clamp for 1.5ml Centrifuge tube
MIXS-A25-012	Clamp for 15ml Centrifuge tube
MIXS-A35-012	Clamp for 50ml Centrifuge tube



#### Nota importante para los aparatos electrónicos vendidos en España Important note for electronic devices sold in Spain Remarque importante pour les appareils électroniques vendus en Espagne

#### Instrucciones sobre la protección del medio ambiente y la eliminación de aparatos electrónicos:



Los aparatos eléctricos y electrónicos marcados con este símbolo no pueden desecharse en vertederos.

De conformidad con la Directiva 2002/96/ CE, los usuarios de la Unión Europea de aparatos eléctricos y electrónicos, tienen la oportunidad de retornar el instrumento para su eliminación al distribuidor o fabricante del equipo después de la compra de uno nuevo. La eliminación ilegal de aparatos eléctricos y electrónicos es castigada con multa administrativa.

Nota importante para los aparatos electrónicos vendidos en Francia Important note for electronic devices sold in France Remarque importante pour les appareils électroniques vendus en France

#### Informations sur la protection du milieu environnemental et élimination des déchets électroniques :



Les appareils électriques et électroniques portant ce symbole ne peuvent pas être jetés dans les décharges.

En réponse à la règlementation, Labbox remplit ses obligations relatives à la fin de vie des équipements électriques de laboratoire qu'il met sur le marché en finançant la filière de recyclage de Récylum dédiée aux DEEE Pro qui les reprend gratuitement (plus d'informations sur www.recylum.com).

L'élimination illégale d'appareils électriques et électroniques est punie d'amende administrative.



