

AGITADOR DIGITAL 3 DIMENSIONES 3-DIMENSIONAL DIGITAL SHAKER AGITATEUR NUMÉRIQUE TRIDIMENSIONNEL

Ref. | Code | Réf. LJL002

RS Lab



Este manual es parte inseparable del aparato por lo que debe estar disponible a todos los usuarios del equipo. Le recomendamos leer atentamente el presente manual y seguir rigurosamente los procedimientos de uso para obtener las máximas prestaciones y una mayor duración del mismo.

This manual should be available for all users of these equipments. To get the best results and a higher duration of this equipment it is advisable to read carefully this manual and follow the processes of use.

Ce manuel est une partie indissociable de l'appareil et doit être mis à la disposition de tous les utilisateurs de l'équipement. Nous vous recommandons de lire attentivement ce manuel et de suivre scrupuleusement les procédures d'utilisation afin d'obtenir des performances maximales et une plus longue durée de vie de l'appareil.

LANGUAGE INDEX

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1. SAFETY INSTRUCTIONS

Safety measures during operation

■ Always use personal protective equipment to avoid risks from:

- Liquid splashes
- Broken glass containers

■ Comply with all applicable safety standards, guidelines and occupational risk prevention regulations

■ Do not touch moving parts while the equipment is in operation

■ Install the instrument on a large, stable, clean, dry, non-slip and fire-resistant surface

■ Do not use the equipment in explosive atmospheres, with hazardous substances or underwater

■ If operation is unstable, reduce the motor speed

■ Secure accessories and containers correctly to avoid risks or damage

■ Do not process samples that may cause dangerous or flammable reactions

■ Only use standard accessories specified by the manufacturer and follow the assembly instructions.

Disconnect the equipment before installing accessories and check that they are in good condition before each use

■ The equipment should only be opened by qualified technical personnel. Disconnect it from the mains

■ Do not cover the equipment during operation. Avoid knocks or pressure on the instrument and its accessories

■ Keep the equipment away from strong magnetic fields

2. INSPECTION

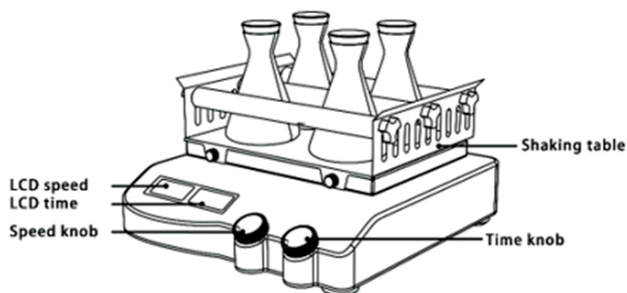
Inspection upon receipt: carefully unpack the instrument and check that it has not been damaged during transport. If you detect any damage, contact your supplier for technical assistance.

Note: If you notice any visible damage to the equipment, do not connect it to the mains.

Contents:

Item	Quantity
Main unit	1
Power cable	1
User manual	1

3. DESCRIPTION OF CONTROL ELEMENTS



Element	Configuration
Speed control knob	Allows you to set the target stirring speed. Press the knob to start or stop the stirring function.
Timer control knob	Allows you to set the desired operating time. Press the knob to start or stop the stirring function.
Speed display	Displays both the programmed speed and the actual operating speed
Time display	Displays the programmed time and the remaining operating time
Power switch	Allows the equipment to be switched on and off

4. DISPLAY



Indicator	Description
SET	Lights up when a target value is being set
ERR	Displayed when an error occurs in the equipment
Display area	When the SET indicator is active, it displays the set value. When the SET indicator is off, it displays the actual operating value

5. OPERATION

- Place the equipment on a stable, level and secure surface. Check that the required supply voltage matches the mains voltage. The power socket must have a proper earth connection.
 - Connect the power cable to the equipment and the mains supply
 - Set the power switch to the ON position
 - The equipment will automatically start a self-test sequence.
 - Once initialisation is complete, the LCD screen will display the last speed value used
 - Turn the operating control knob to set the target speed
 - Operation:
 - Press the speed control knob to start the stirring function. Press it again to stop stirring.
 - Turn the timer control knob to set the desired operating time. Press the timer knob to start agitation at the programmed speed and time.
 - During operation, agitation can be stopped at any time by pressing the speed control knob or the timer knob.
 - If the timer knob is pressed again, agitation will restart and the timer will begin counting down again.
 - When the programmed time reaches zero, the equipment will stop automatically, and an acoustic signal will be emitted.
 - If all the above operations are performed normally, the equipment is ready for use. Otherwise, the equipment may have been damaged during transport. Contact your supplier.
- Note: The speed can be changed during agitation.

6. FAULTS AND TROUBLESHOOTING

6.1. The equipment does not work when switched on

Possible causes and corrective actions:

- Check that the power cable is properly connected
- Check whether the fuse has blown and, if necessary, replace it with another one with the same specifications

6.2. The stirring function stops suddenly

Possible cause:

- The LCD screen displays the message 'ER 03', indicating that the overload protection has been activated

Corrective actions:

- Press the speed control knob or timer knob to completely stop the agitation function
- Reduce the load applied to the equipment
- Restart the agitation function

If agitation does not start, repeat the procedure, progressively reducing the load until the equipment operates normally.

7. MAINTENANCE AND CLEANING

Proper maintenance ensures the correct operation of the equipment and prolongs its useful life.

7.1. General instructions

- Do not spray cleaning products directly onto the equipment
- Do not disconnect the power cable by pulling on it during cleaning.
- Only use the recommended cleaning products listed below:

Type of dirt	Recommended product
Dye	Isopropyl alcohol
Building materials	Water with surfactant/isopropyl alcohol
Cosmetics	Water with surfactant/isopropyl alcohol
Food products	Water with surfactant
Fuels	Water with surfactant

Before using any other cleaning or decontamination method, the user must confirm with the manufacturer that such method will not damage the equipment.

Wear suitable protective gloves during cleaning operations.

Note:

- Electronic components must not be cleaned with cleaning products.
- If maintenance service is required, the equipment must be cleaned beforehand to avoid contamination by hazardous substances. It must be sent in its original packaging.
- If the equipment is not going to be used for an extended period, switch it off and store it in a dry, clean place at room temperature and on a stable surface.

8. TECHNICAL SPECIFICATIONS

Code	LJL002
Model	RSLAB-14
Type of movement	3D Orbital
Shaking angle	9
Display	LCD
Speed range	10-70 rpm
Type of operation	Continuous/programmed
Timer	1-1199 min
Maximum stirring weight	5 kg
Platform material	Aluminium alloy, coating
Dimensions	430 x 360 x 106 mm
Weight	9 kg
Power	100-240 V /50-60 Hz
Power consumption	50 W
Permissible ambient temperature	5-40 °C
Permissible relative humidity	80
Protection class	IP 21