

Laboratory centrifuge

LABOTRIX SPIN C2

PRODUCT PASSPORT

Kyiv

2026

1. Basic product information

- 1.1. Product name — Laboratory centrifuge.
- 1.2. Trademark — Labotrix.
- 1.3. Model — Spin C2; full trade name — LABOTRIX SPIN C2.
- 1.4. Manufacturer — Labotrix Group Limited, China.
- 1.5. Intended use: Laboratory centrifuge is used for sedimentation of cells, biological components and molecules (in particular nucleic acids and proteins after their isolation) and for separation of heterogeneous mixtures under the influence of centrifugal force. The device is used in biology classrooms of secondary education institutions for laboratory work, practical classes and demonstrations, as well as in the preparation of biological preparations for microscopic examination.
- 1.6. Design features: Electric table-top device with electric drive and microprocessor control. Equipped with a digital display for displaying the rotation frequency and operating time, a mechanical lid with a lock, a rotor for 6 tubes with a capacity of 1.5 and 2.0 milliliters and an overload protection system.

2. Technical specifications

- Brand — Labotrix
- Model — Spin C2
- The article number is LTX-SPIN-C2
- Product type — microformat laboratory centrifuge
- Functional application - precipitation of cells, biological components and molecules (nucleic acids, proteins) and preparation of biological samples by centrifugal separation of heavy and light phases
- Rotor configuration — 6 slots for 1.5 and 2.0 milliliter tubes
- Rotational speed adjustment range (revolutions per minute) — from 500 to 4000
- Maximum rotation speed (revolutions per minute) - up to 6000
- Maximum relative centrifugal acceleration (units of g) is about 2000
- Speed control - provided with digital indication on the display
- Timer — available with the ability to set the centrifugation time
- Acceleration and stopping time (second) - a few seconds
- On/Off switch - safety switch
- Housing material - plastic with non-slip support feet
- Power supply - from the mains, parameters are given on the nameplate
- Dimensions and weight - indicated in the product passport and on the manufacturer's plate
- Language of marking and operating documentation — Ukrainian
- Product marking — trademark, model and a space for the inventory number
- Packaging — individual box of corrugated cardboard with the contents secured

- Documentation supplied — product passport with warranty card and operating manual
- Installation method - desktop, on a laboratory bench
- Ready-to-use condition — supplied assembled, requires no preliminary setup
- User requirements - operation is carried out by a teacher or laboratory assistant, independent work by students without supervision is not allowed
- Operating conditions — premises of an educational institution, air temperature from +5 to +40 °C, relative humidity from 40 to 60 % without condensate
- Service life (year) — 5
- Warranty period (month) — 12

3. Equipment

- Laboratory centrifuge with installed rotor — 1 pc.
- Rotor for 6 tubes with a volume of 1.5 and 2.0 ml — 1 pc.
- Set of test tubes or adapters for standard test tubes - depending on the configuration
- Power cord — 1 pc.
- Product Passport and Warranty Card — 1 pcs
- Individual transport packaging — 1 pcs

The exact contents of the kit are indicated in the packing list and product passport. The factory packaging must be kept for further transportation and storage of the device.

4. Safety measures

4.1. General requirements

- Please read this passport before first use and keep it with the appliance and proof of purchase.
- A centrifuge in an educational institution is operated by a teacher or laboratory assistant; students work with the device only under the direct supervision of an adult.
- Unpack the device and inspect it for mechanical damage. Do not use the device with a damaged power cord or cracked rotor.
- Place the centrifuge on a flat, solid, horizontal surface that can withstand vibration. Do not place the instrument on unstable stands, glass, or soft-covered surfaces.

4.2. Electrical safety and operation

- Make sure that the power supply parameters correspond to those indicated on the appliance rating plate and connect the cord to a grounded outlet.
- Do not leave the appliance unattended when it is switched on. Do not insert any objects into the rotor chamber while it is rotating.

- Do not remove or tamper with protective covers. Repairs should only be performed by qualified personnel.
- Do not use the appliance with a damaged cord or plug. Unplug the appliance before cleaning or servicing.

4.3. Safety during rotor operation

- Always balance the rotor before starting. Place the tubes in pairs, opposite each other, of equal mass with their contents.
- Do not run the centrifuge with an open or defective lid, with the rotor removed, or if the lid does not lock into place.
- Never open the lid until the rotor has come to a complete stop. This is the main safety rule when working with a centrifuge.
- Do not brake the rotor with your hand or foreign objects; do not allow the device to move on the table during rotation.

4.4. It is strictly forbidden

- Centrifuge flammable, volatile, corrosive and explosive liquids and compounds.
- Do not use tubes that are cracked, deformed, or melted, or of a type not intended for this rotor.
- Exceed the nominal weight of one tube with contents specified in the rotor passport.
- Disassemble the device yourself, change the geometry of its parts, or remove protective covers.
- Leave the device unattended while the rotor is rotating; move or tilt the centrifuge during operation.

5. Preparation for work

- 5.1. Unpack the centrifuge and inspect all components for damage. Make sure that the housing, lid, rotor, and power cord are intact.
- 5.2. Place the instrument on a sturdy, level, horizontal laboratory bench that is capable of withstanding vibration. Leave sufficient space around and above the instrument for the lid to be fully opened and for free air circulation.
- 5.3. Make sure that the ventilation holes are not blocked. Do not place the centrifuge near heating devices, in places with high humidity or near the edge of a table.
- 5.4. Check the power supply and connect the power cord to a grounded outlet. The frequency and time should appear on the display.
- 5.5. Open the lid and inspect the rotor chamber: it should be clean, free of water, glass fragments or material residues. If necessary, wipe the chamber with a clean cloth.
- 5.6. Check that the rotor rotates easily and without binding by hand. The rotor should be secured without knocking or noticeable play. For a removable rotor, make sure that the union nut or clamping screw is securely fastened.

- 5.7. Prepare the tubes: Use only intact tubes of the type and volume specified for the rotor (1.5 and 2.0 ml). Discard damaged tubes. Fill them with sample to the required level and close the caps tightly.
- 5.8. If the device has been in a cold room for a long time, give it time to acclimatize to room conditions before starting it for the first time.

6. Procedure

6.1. Rotor balancing

This is the most important operation. An unbalanced rotor causes strong vibration, noise, scattering of the instrument on the table and damage to internal parts. Follow two rules: symmetrical placement of tubes opposite each other and the same weight of each pair. If the number of samples is odd, add a counterweight tube (the same tube with water). All tubes in the rotor must be of the same type with the same caps.

6.2. Download and launch

- Place the balanced tubes into the rotor slots, following the symmetrical placement diagram. Close the instrument lid until it clicks into place.
- Turn on the power. Set the desired spin speed and spin time using the buttons on the control panel.
- Press the start button. The rotor will accelerate in a few seconds. During acceleration, monitor the device from a distance.
- Monitor the operation for the first few seconds. If there is a strong vibration, knocking, grinding, or the device is moving on the table, press the stop button immediately.

6.3. Control during work

- Do not leave the appliance unattended while the rotor is rotating. Observe the display and the sound of operation.
- The rotor will stop automatically after the timer has run out. Wait until it has come to a complete stop before opening the lid.

6.4. Completion of work

- Carefully remove the tubes from the rotor without shaking them. A sudden movement will mix the sediment and spoil the test result.
- Remove the supernatant with a pipette or carefully decant it while holding the sediment.
- Turn off the power and unplug the power cord from the outlet after finishing work.

7. Care, maintenance and possible malfunctions

7.1. Cleaning

- After each use, inspect the rotor chamber and wipe it and the rotor with a cloth dampened with a mild detergent solution, then wipe dry.
- If the tube breaks, remove the fragments with tweezers, thoroughly wash the rotor slots and disinfect.
- Do not pour water into the chamber or onto the housing. Do not immerse the device in liquid or use abrasive powders, solvents or acetone.

7.2. Periodic control

- Once a month, check the rotor for ease of rotation by hand and for secure attachment. The ventilation holes should be clean and unobstructed.
- Check the condition of the power cord. Do not use the appliance if it is damaged.
- Repairs to the electrical part and drive must be performed only by an authorized service center.

7.3. Possible malfunctions and ways to eliminate them

Symptom	Possible cause	User actions
Strong vibration, knocking, the device moves	Rotor imbalance; uneven surface; loose rotor mounting	Stop the device, overload the rotor symmetrically, move the centrifuge to a flat, hard table
The rotor does not rotate after starting.	The lid is not closed or locked; time and speed are not set; there is no voltage in the mains	Close the cover until it clicks into place, set the parameters, check the socket
The rotor stops spontaneously	Overload or overheating protection has been triggered; voltage has disappeared	Let the appliance cool down, reduce the load and spin speed.
There is liquid in the chamber, the test tube is cracked.	Defective tube; filled above the mark; wrong type	Remove debris with tweezers, disinfect the chamber and rotor, and use healthy tubes in the future.
The precipitate does not form or it is loose.	Speed or time too low; mixture too thick or viscous	Increase frequency and duration within acceptable limits; dilute sample

Symptom	Possible cause	User actions
Smell of hot insulation, smoke, sparks	Engine or wiring malfunction	Turn off the appliance, disconnect from the mains, contact the supplier

8. Storage and transportation conditions

- Store the centrifuge in a dry, closed room at a temperature between +5...+40 °C and a relative humidity of up to 80% without condensation.
- Remove tubes from the rotor before long-term storage. Close the lid to protect against dust.
- Protect the device from shocks, vibrations, direct sunlight and aggressive substances.
- Transport the centrifuge switched off in the original or similar rigid packaging in a closed mode of transport. Do not place heavy objects on the packaging.
- Only carry the instrument when it is switched off, holding the housing with both hands, without tubes in the rotor.
- The storage period before commissioning is not limited, provided these requirements are met.

9. Warranty obligations

- 9.1. The warranty period of the product is 12 months from the date of sale specified in the warranty card.
- 9.2. The manufacturer guarantees that the product complies with the declared technical characteristics, provided that the rules for transportation, storage and operation set out in this passport are followed.
- 9.3. During the warranty period, product defects that have arisen due to the manufacturer's fault will be eliminated free of charge. The method of elimination (repair, component replacement or product replacement) is determined by the service center.
- 9.4. Warranty service is provided upon receipt of a correctly and completely filled out warranty card and a document confirming the fact and date of purchase.
- 9.5. The warranty does not apply to cases where the malfunction is caused by:
 - mechanical damage, in particular cracks, chips and deformation of the housing and of the components of the product;
 - violation of the operating, storage or transportation rules set out in this passport;
 - ingress of liquid or foreign objects into the product, and also the action of insects and animals;
 - independent disassembly, repair or modification of the product, in particular repair at unauthorized workshops;

- use of the product other than for its intended purpose;
- force majeure circumstances (fire, flood, earthquake, etc.).

9.6. The warranty does not apply to natural wear and tear of the coating and appearance of the product, as well as to consumables.

10. Product disposal

- The product must not be disposed of together with unsorted municipal waste. This is indicated by the marking in the form of a crossed-out container on the product or its packaging.
- After the end of the service life, hand the product over to a collection point for the corresponding waste or to an organization holding the appropriate permit.
- Hand over the packaging elements (cardboard, polymer materials) to the corresponding streams of recyclable materials.

Contacts

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Conditions of use and storage of the product

The product is intended for educational work in general secondary education institutions and is used only under the control and supervision of a teaching staff member; the recommended age of students — from 10 years, that is, students of grade 5 and of higher grades. Keep the product in a dry, clean and ventilated room at a temperature from +5 to +40 °C and relative air humidity up to 80 % without condensation, separately from heat sources and out of direct sunlight, moisture and dust. Use the product exclusively for its intended purpose and do not allow drops, impacts or other mechanical damage. If you notice damage, a crack or any malfunction, stop working with the product immediately and inform the teacher or the responsible person of the educational institution; repairing the product on your own is prohibited.

WARRANTY CARD

Product name:	Laboratory centrifuge
Product model:	LABOTRIX SPIN C2
Serial number:	
Date of sale:	
Warranty period:	12 months from the date of sale
Trading organization:	
Signature of the seller:	

The goods have been received in working order, without visible damage, complete, and have been checked in my presence. I have no claims regarding the quality of the goods; I have read and agree to the operating and warranty service conditions.

Full name of the buyer

Buyer's phone number Buyer's signature

Dear Customer!

Thank you for choosing Labotrix products. After-sales service of this product is provided in accordance with the regulations of the company and the legislation of the country of sale. So that we can serve you quickly and without unnecessary formalities, check that this warranty card is filled in correctly at the moment of purchase and keep it together with the payment document throughout the entire warranty period. When applying for repair, hand the product over to the seller or to the service center together with the filled-in card.

Procedure for applying

1. The right to free warranty service for the product is valid for 12 months from the date of sale specified in the warranty card. Within this period, components that have failed due to a manufacturing defect are repaired or replaced without payment from the buyer.
2. Before contacting, make sure that the malfunction is not caused by the reasons listed in section 9 of this passport, and if possible, use the table of possible malfunctions in section 7.3.
3. After the 12-month warranty period, repairs are carried out for a fee; the cost of work and spare parts is determined depending on the nature of the malfunction.

Grounds for refusal of warranty service

The company reserves the right to refuse free service or to perform the work on a paid basis if at least one of the following circumstances is established:

- absence of the warranty card, its incomplete or corrected completion, and also the absence of a document confirming the purchase;
- non-conformity of the serial number of the product with the number specified in the card, or damage to the factory marking;
- traces of independent disassembly, repair or modification of the product;
- damage caused by violation of the operating rules, connection to an unsuitable power source or external mechanical impact;
- damage as a result of force majeure circumstances.

Service Records

Date of entry	Description of the malfunction	Work performed	Position, signature, full name of the responsible person