

# Manual Microtome YR421 Instruction Manual

Thank you very much for purchasing our Rotary Microtome YR421

Please read the "Operating Instructions" and "Warranty" before operating this unit to assure proper operation. After reading these documents, be sure to store them securely together with the "Warranty" at a hand place for future reference.

Warning: Before operating the unit, be sure to read carefully and fully understand important warnings in the operating instructions.



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#### I. Brief

The YR421 rotary microtome is specially to meet the needs of lest laboratories of contemporary histology and pathology. It has such advantages as stability and is easy to operate. It can slice sections with fine thickness and continuously. All these features make the microtome section the best-favored appliances of all the histology experts and scientists.

### **I**. Use (Range of use)

The microtome section is used in hospitals, medical education institutions, sanitation and ant epidemic station, public security and legal medical expert, agriculture college, veterinary medicine and research organizations to obtain pathological and biological paraffin sections of plant and zoological fissure. It is very important medical appliance in diagnoses and laboratories.

#### **III**. Specifications:

- 1. Range of slice thickness:  $1-35\mu m_{\sim} > 35\mu m$
- 2. Division of thickness adjustment: Min 1µm
- 3. Error of precision of slice: ±10%
- 4. Area of section: Max.50×40mm
- 5. Overall dimensions: 420×300×320
- 6. Net weight: 28kg

#### IV. Step of operate:



- 1. Circle hand-wheel
- 3. Clutch
- 5. Regular button of slice knife
- 4. Adjustment spanner of incline angle of slice knife
- 6. Crosswise adjustment button of paraffin
- 7. Paraffin pliers
- 8. Vertical adjustment button of paraffin
- 9. Regular locking spanner of paraffin 10. Fine trimmer of slice thickness



11. Rough trimmer of slice thickness 12. Spanner of stopping circle hand-wheel

1. Turn the movable block round to the highest place, and then put the paraffin section of pruned tissue into the paraffin plier (7) and fasten them, but don't do it too tight in order to not break the paraffin section to pieces.

2. Put the slice knife into knife clip, moving the adjustment spanner of incline angle of slice knife (4). Adjust the seat of slice knife blade, then turn the regular button of paraffin (5) fasten, so as not to loosen the slice knife.

3. turn the regular locking spanner of paraffin (9) on lessen, then turn round the adjustment button of crosswise-vertical direction, to adjust the surface of slice on fine place, turn the spanner (9) on fasten again, so as not to loosen it.

4. Pull the clutch (3) on the left side, push ahead with the seat of slide knife (2) and in touch with the place of tissue section, then pull the clutch on the right side, fasten the knife seat.

5. Revolve around the hand-wheel (1) while turn round the rough trimmer of slice thickness (11) to cutting the sections making the surface of paraffin tissue perfect, and then adjust the fine trimmer of slice thickness (10) to get requirements of thickness graduation. Cutting the tissue section while circle the hand-wheel. If the hand-wheel continually revolving, the sections of sliced will well distributed.

6. Finish the cutting work put the hand-wheel on regular seat and fasten it.

7. Pull the clutch (3) on the left side, move back the seat of slice knife, loosen the button of paraffin clip, take off the paraffin section.

8. Loosen the regular button of slice knife. Take off the knife, and then put the knife into knife box.

9. Clear away the paraffin scrap, impurity, and grease spots on the instrument. Pour into just the right amount of lubricating oil at the moving place (hole).

10. After the instrument has stopped work. Close the glass plastic cover to keep it clarity and take care of it.

#### VI. Safeguard and Caution:

1. Wipe away the anti-rust oil on the microtome section before you use the instrument at first time. (Wipe away the grease spots by alcohol or petrol)

2. Each of the moving places should be pour into just the right amount of lubricating oil assure the places easy to operate.

3. The turning should be well distributed when turn round the hand wheel. Be sure the hand-wheel turn in level and smooth.

4. Before cutting the sections you most check the knife, tissue section. Seat of slide knife, paraffin clip etc. if the parts are fastened, ensure the slice thickness equally.

5. Before revolving around the hand-wheel you must pull out the spanner of stopping circle



hand-wheel (12), fix the turn direction and turn hand-wheel.

6. When put the slice knife in a certain place, it must be notice that to avoid the knife blade break and out apart of your fingers.

7. Clear away the paraffin scrap; impurity with a damp cloth after the cutting has finished to ensure the instrument clarity.

8. End of the cutting, it must pour into some oil and take good care of it in order to ensure the high precision and perfect performance.





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