



A Geno Technology, Inc. (USA) brand name

Mixer, Rotating

**Cat. No. BT912,
Accessories: BT912-A, BT912-B, BT912-C**

Thanks for choosing BT912 Rotating Mixer. This operation manual describes the function and operation of the instrument. Please read this manual carefully before operating the Rotating Mixer.

Please check the instrument with the packing list when you first open the packing case. If anything does not match with the packing list, please contact BT Lab Systems.

SAFETY WARNINGS & GUIDELINES

The operation, maintenance and repair of the instrument should comply with the basic guidelines and the remarked warning below. If you don't comply with them, it will have an effect on the scheduled life of the instrument and the protection provided.

- This product is a normal and an indoor Instrument which conforms to Standard B style-1 type-GB9706.1.
- Before operation, read the Manual carefully. These units are designed for use in laboratory environments by persons knowledgeable in safe laboratory practices.
- The operator should not open or repair the Instrument by himself, which will result in invalidation of the warranty.
- A.C. power's grounding should be reliable to safeguard against an electric shock.
- The instrument should be used in an area with low temperature, little dust, no water, no sunshine or hard light and with good air circulation. Do not use where there is corrosive gas or a strong magnetic field. Keep far away from central heating, camp stove and other hot sources. Do not put the instrument in a wet and dusty area. The vent on the instrument is designed for aeration. Do not wall up or cover the vent.
- Power off when not in use. If the instrument will not be used for a long period, unplug, and cover with a piece of cloth to protect it from dust.
- In case of the following, unplug the instrument at once and contact BT Lab Systems.
 - The instrument comes into contact with liquid
 - The instrument gets soaked or burned
 - The instrument emits an abnormal sound or smell
 - The instrument is dropped or the outer shell damaged
 - The instrument functions abnormally.

EQUIPMENT MAINTENANCE

The instrument and the accessories should be cleaned with a soft cloth and rubbing alcohol.

INTRODUCTION

The BT912 Rotating Mixer is compact, uses DC brushless motor and micro-computer controlled technology. It is used in biotechnology, microbiology, medical analysis, etc.

FEATURES

- Ergonomic keyboard. LED time and speed display.
- Several optional turntables supplied, suitable for tubes from 1.5ml to 50ml.
- The turntable's gradient can be adjusted from 0 to 90 degree.
- Timing function. Timing setting ranges from 0 to 9999min, LED displays remaining time. When the program time ends an alarm sounds.
- Brushless motor, speed -controlled accuracy, long life and maintenance-free.

OPERATING CONDITIONS

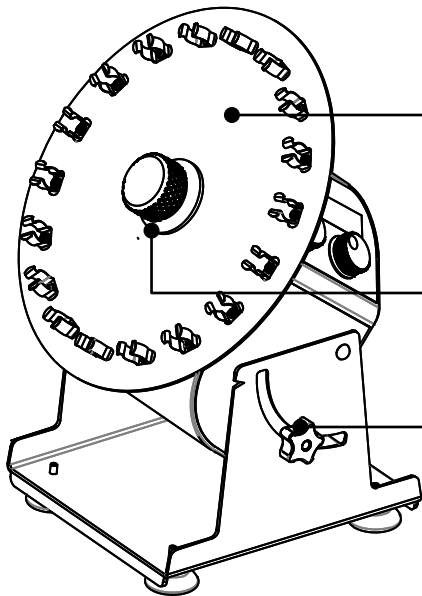
Normal operating conditions are:

- Ambient temperature: 4°C- 45°C
- The relative humidity: <70%
- Power supply: AC100-240V, 50/60Hz

SPECIFICATIONS

- Gradient Range: 10 ~80 rpm
- Time Range: 0-9999 min
- Optional Mode: Timing / continuous
- Input Power: 35W
- Dimension: 236 X 220 X 246 mm
- Net Weight: 4.5 kgs

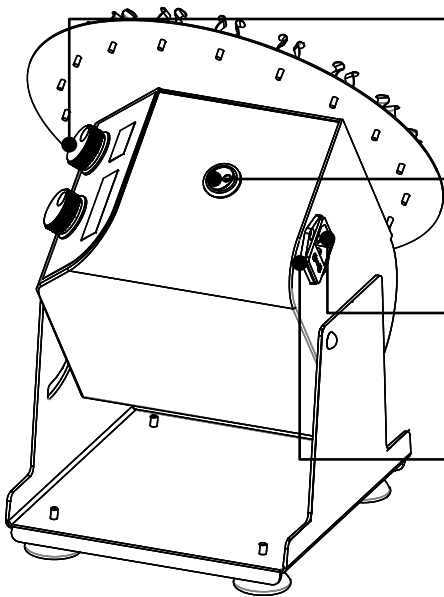
EQUIPMENT OVERVIEW



Turntable

Knob 1 (to adjust turntable)

Knob 2 (to adjust angle)



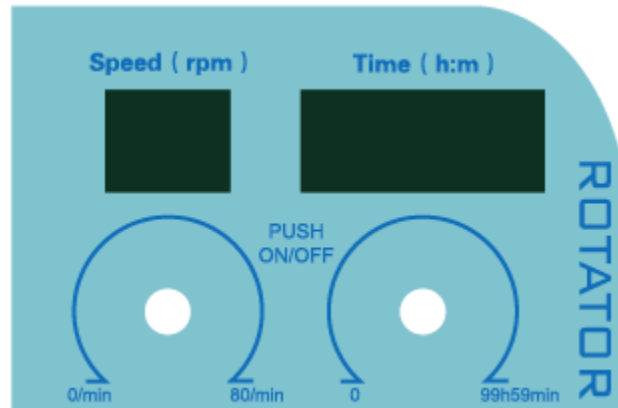
Adjusting Knob

Power Switch

Power Connector

Fuse

KEYBOARD AND DISPLAY PANEL



OPERATION

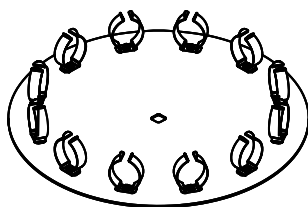
Speed knob. Rotate the knob clockwise to increase speed, rotate the knob counterclockwise to decrease speed. Press the knob to start.

Time knob. Rotate the knob clockwise to increase the time setting. rotate the knob counterclockwise to decrease the time setting. Press the knob to change the unit from 1 minute to 10 minutes and 1 hour to 10 hours.

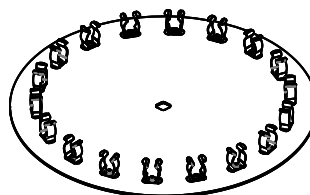
TURN TABLE ACCESSORIES & INSTALLATION

Three types of optional turntables: (refer to below).

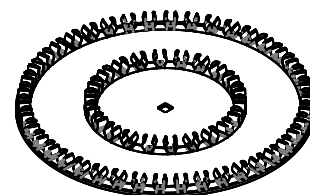
- BT912-A – 64 x 1.5ml
- BT912-B – 18 x 15ml
- BT912-C – 10 x 50ml



BT912-C

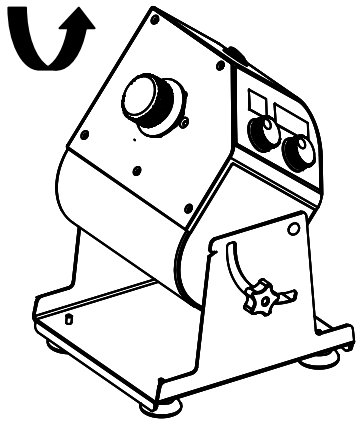


BT912-B



BT912-A

INSTALLATION



Rotate knob1 counter clockwise to remove it.
(refer to Figure A).

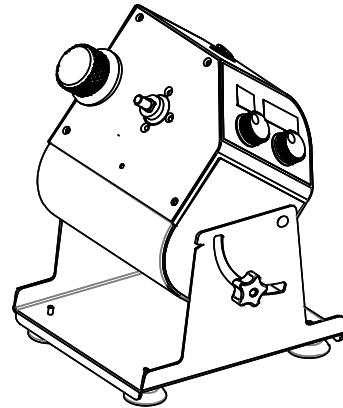
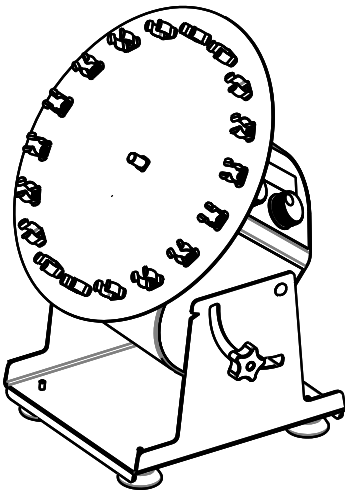
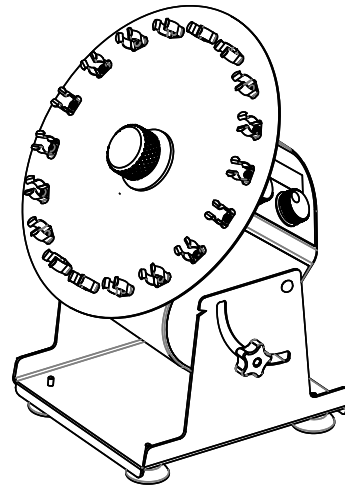


Figure A

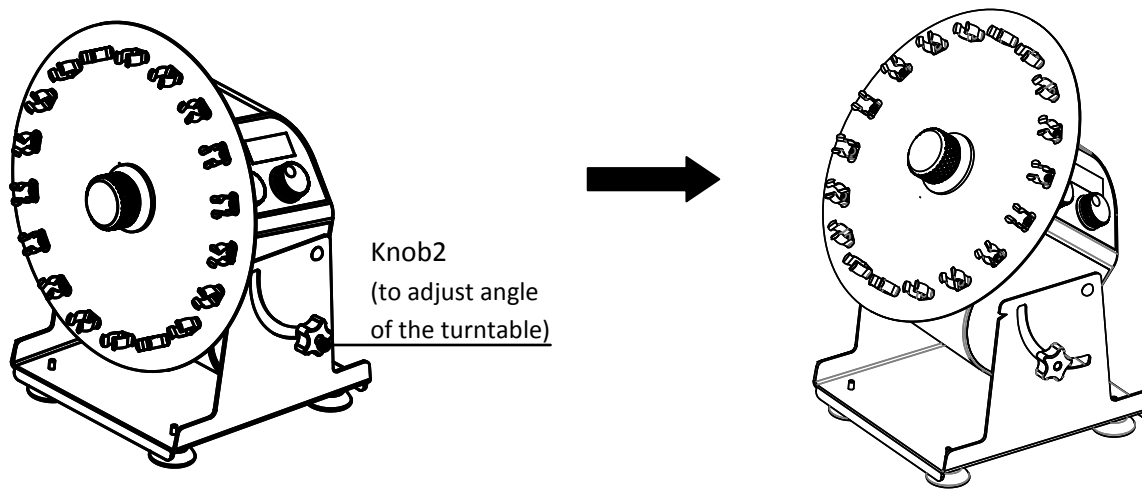


Place the turntable on the instrument



Rotate knob1 clockwise to tighten the
turntable onto the instrument.

Adjust angle of the turntable




Rotate knob2 counterclockwise to make the angle of the turntable adjustable. Adjust its angle according to the scale.

Rotate knob2 clockwise to tighten the turntable

OPERATION

Speed and Time Setting

1. All digital LED displays  when instrument is powered on. The instrument enters into the initial program with a beep sound.
2. The speed LED displays last running speed. Rotate the speed knob clockwise to increase the speed., Rotate the speed knob counterclockwise to decrease the speed value.
3. The time LED displays last time setting. Rotate the speed knob clockwise to increase the time. Rotate the time knob counterclockwise to decrease the time value
 - a. To increase the timing unit, press the time knob. Press the time knob once to change from 1 minute to 10 minutes, the digit will flicker. To change to 1 hour press the time knob again, the digit will flicker. When the digit flickers rotate the time knob to change the value.

Stop / Start

1. Press speed knob to start or stop the instrument.
2. When the time is up,the instrument stops running and sounds an alert.
3. When the program ends, the instrument returns to start screen. Rotate the speed knob or time knob to reset speed and timing. Press speed knob to start operation.
4. To run the program again with the same settings, press the speed knob without adjusting the speed or timing.
5. Press speed knob to stop the instrument. Press speed knob again to restart the instrument.

TROUBLESHOOTING

Issue	Possible Causes	Solution
No signal display when power on.	No power	Check the power
	Broken switch	Contact BT Lab Systems
	Others	Contact BT Lab Systems
Rotating speed of the turntable not stable	Samples placed imbalanced	Place the samples evenly
Actual speed and displayed speed are not matching	Broken controller	Contact BT Lab Systems
Display ERR	Speed not working	Contact BT Lab Systems

WARRANTY

The BT912 Rotating Mixer is warranted against defects in materials and workmanship for 1 year. If any defects occur in the instrument or accessories during this warranty period, BT Lab Systems will repair or replace the defective parts at its discretion without charge. The following defects, however, are specifically excluded:

1. Defects caused by improper operation.
2. Repair or modification done by anyone other than BT Lab Systems or an authorized agent.
3. Damage caused by substituting alternative parts.
4. Use of fittings or spare parts supplied by anyone other than BT Lab Systems.
5. Damage caused by accident or misuse.
6. Damage caused by disaster.
7. Corrosion caused by improper solvent or sample.

This warranty does not apply to parts listed below:

1. Fuses
2. Lamps
3. Starters

For any inquiry or request for repair service, contact your local BT Lab Systems office. Inform BT Lab Systems of the model and serial number of your instrument.

REGULATORY NOTICE

IMPORTANT: This BT Lab Systems instrument is designed and certified to meet safety standards and EMC regulations. Certified products are safe to use when operated in accordance with the instruction manual. This instrument should not be modified or altered in any way. Alteration of this instrument will:

1. Void the manufacturer's warranty
2. Void the safety and EMC certification
3. Create a potential safety hazard

BT Lab Systems is not responsible for any injury or damage caused by the use of this instrument for purposes other than those for which it is intended, or by modifications of the instrument not performed by BT Lab Systems or an authorized agent.

TECHNICAL SUPPORT

BT Lab Systems offers technical support for all of its products. If you have any questions about the product's use or, operation, please contact BT Lab Systems at the following info.

E-Mail: info@BTLabSystems.com