



A Geno Technology, Inc. (USA) brand name

Mixer, Tube Roller

Cat. No. BT914, BT915

Thanks for choosing BT Lab Systems' BT914/BT915 Mixer, Tube Roller. This operation manual describes the function and operation of the instrument. In order to use the instrument properly, please read this manual carefully.

IMPORTANT SAFETY INFORMATION

Users should understand how to use the instrument properly before operating it. Please read this operation manual carefully before using the instrument.

The operation, maintenance and repair of the instrument should comply with the basic guidelines and warning below. Ignoring these instructions will affect the life of the instrument and safety precautions.

- This product is an indoor Instrument which conforms to Standard B style- I type- GB9706.1.
- These units are designed for laboratory use by persons knowledgeable in safe laboratory practices.
- The operator should never open or repair the instrument. Opening or repairing the instrument will void the guarantee and can cause accidents.
- The power plug should safeguard against an electric shock. The 3-pin plug supplied with the instrument should be matched with a suitable grounded socket.
- 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.

MAINTENANCE

The instrument and the accessories should be cleaned with a cloth dampened by alcohol. If there are smudges on the instrument, clean it with a dry cloth.

INTRODUCTION

The Mixer, Tube Roller is compactly designed with a DC brushless motor. It is used in mixing blood samples, sticky substances and solid-liquid suspensions. The two models provide two operation modes - rolling and swinging to improve mixing efficiency and safety. It is used in preventing blood clotting, immunoprecipitation, and other similar functions.

KEY FEATURES

- Compactly designed, simple operation, LED time and speed display.
- Two models have two types of operation - rolling type and rolling and swinging type. The instrument has continuous working mode, and is safe and stable.
- With stable performance motor, adjustable speed, max. speed 80 rpm. Low noise and long life.
- Compatible with different sizes of tubes. Large range of applications.
- Built with DC brushless motor, maintenance free.

NORMAL OPERATING CONDITIONS

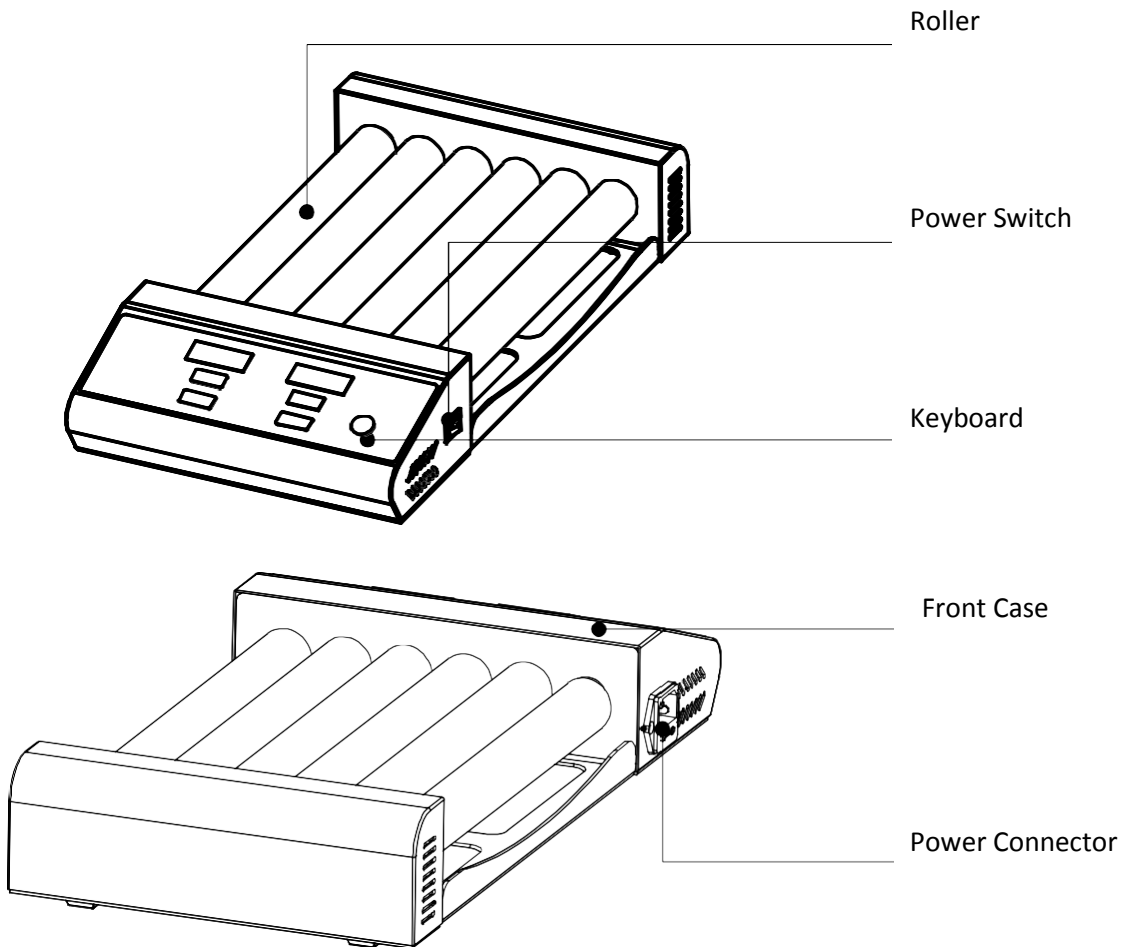
- Ambient Temperature: 4°C ~45°C
- Relative Humidity: ≤70%
- Power: AC100-240V~ 1.5A

TECHNICAL SPECIFICATIONS

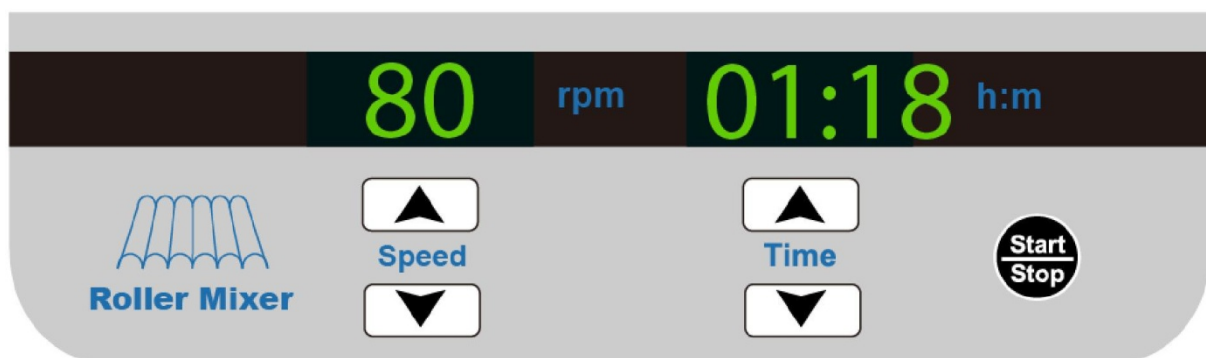
Type	BT914	BT915
Operation Mode	rolling & swinging	rolling
Amplitude	24mm	-
Max. Capacity	4kg	
Roller Quantity	6 rollers	
Motor	brushless DC motor	
Speed Accuracy	1rpm	
Roller Length	280mm	
Speed Range	10-80rpm	
Dimension (DxWxH)	450 x 260 x 120mm	
Net Weight	4.5kg	
Voltage	AC100-240 50-60HZ	
Power	25W	

EQUIPMENT OVERVIEW

This section describes the instrument's mechanical structure, the keyboard and functions of each key. Please learn this section well before the instrument is operated .



KEYBOARD AND DISPLAY PANEL



KEY FUNCTION

- "DOWN" arrow key - Decreases the time value or speed value

- “UP” arrow key - Increases the time value or speed value
- START/STOP - Press Start/Stop key to start or stop the program.

OPERATION GUIDE

Setting Speed and Timing

1. Switch on the instrument, LED display reads “8” The instrument will beep.
2. Press “UP” or “DOWN” of speed key. It displays the most recent running speed. The unit digit will flicker. Press “UP” or “DOWN” of speed key to adjust the speed value. Hold down the key to increase or decrease quickly.

Release the key. The instrument confirms and saves the setting value.

3. Press “UP” or “DOWN” of time key. It displays the most recent setting time. The unit digit will flicker. Press “UP” or “DOWN” of time key to adjust the timing value. Hold down the key to increase or decrease quickly.

Release the key. The instrument confirms and saves the setting value.

NOTICE: If the timing value displays 00:00 this means the running timing is ongoing.

Stop / Start

1. Press “start/stop” key to start or stop the program.
2. Press “start/stop” to run the program after speed and timing are set. When the time is up the instrument stops running and an alert sounds.
3. Press “stop/start” to stop the running program.
4. When the program completes, or the program is stopped by pressing “stop/start” key, the instrument will be in ready mode. In ready mode, press the “UP” or “DOWN” arrow of speed key or timing key to reset speed and timing.
5. Press “start/stop” without adjusting speed or timing in ready mode, the instrument will operate the program of the most recent setting.

TROUBLE SHOOTING

Issue	Possible Causes	Solution
No signal display when the power is on.	No power	Check the power
	Broken switch	Contact BT Lab Systems
	Other	Contact BT Lab Systems
Actual speed and displayed speed are not matching	Broken controller	Contact BT Lab Systems
Err displays	Speed out of control	Contact BT Lab Systems

WARRANTY

The BT914/BT915 Mixer, Tube Roller 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

Breakdown due to improper use, operation in inappropriate conditions, maintenance or refitting without authorization are not in warranty coverage.

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:

E-Mail: info@BTLabSystems.com