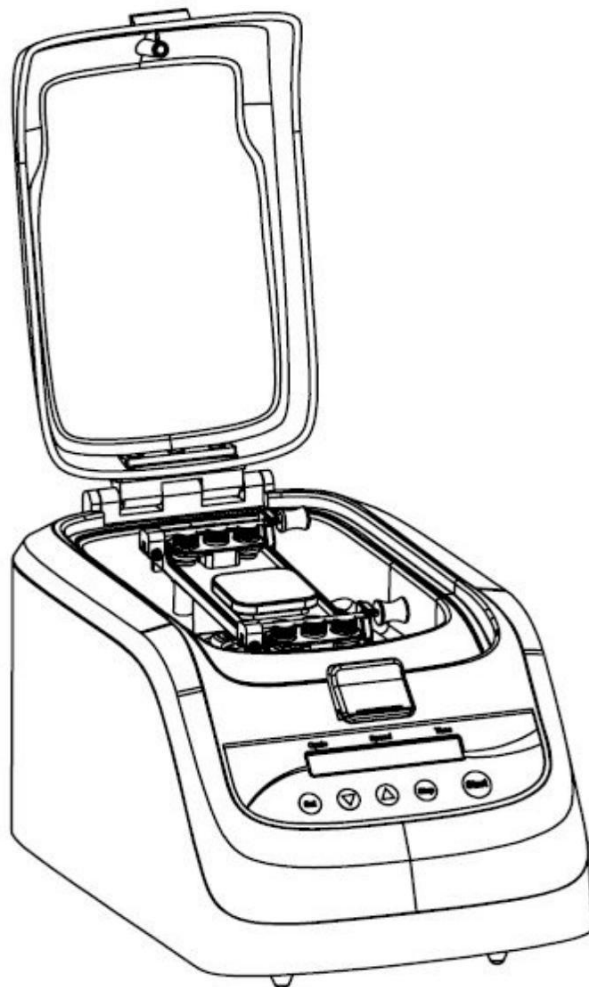




NeoSamplePrep - Homogenizer - 1-6 Samples

Operation Manual

NB-12-0004B



Opening Check

Please check the Instrument and Appendix with the packing list when you first open the instrument packing case. If you find there is something wrong with the Instrument and the Appendix, do contact the vendor or the producer.

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Safety Warnings and Guidelines

1. Important operation information of the security:

Before the users' operation, they should have a perfect conception of how to use the Instrument. Therefore, read this Manual carefully before using it.



Operation before reading the Manual is forbidden. Read the guidelines and directions below and carry out the countermeasure according to them.

2. Security:

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 effect on the scheduled using life of the Instrument and the protection provided.



This product is a normal and an indoor Instrument which conforms to Standard B style- I type- GB9706.1.



Before using the device, read the Manual carefully. These units are designed for use in laboratory environments. The device must be used by skilled personnel with the appropriate training.



The operator should not open or repair the Instrument by himself, which will result in losing the qualification of repair guarantee or occur accident. If there is some wrong with the Instrument, the company will repair it.



Before power on, guarantee the voltage used should be accordant to the voltage needed, and the rated load of electrical outlet should not lower than the demand.

If the electric line is damaged, you should replace it with the same type. You should assure there's nothing on the electric line and you should not put the electric line in the ambulatory place.

Hold the jack when you pull out the electric line, and don't pull the electric line.



The Instrument should be put in the place of low temperature, little dust, no water and no sun or strong lamp. What's more, the place should be good aeration, no corrosively gas or strong disturbing magnetic field, far away from central heating, camp stove and other hot resource. Don't put the Instrument in wet and dusty place. The vent on the Instrument is designed for aeration. Don't wall up or cover the vent in order to keep from high temperature. If you use the more than one Instrument the same time, the distance between them should be more than 100cm.



Power off when you finish your work. Pull off the connector plug when there's long time no use of the Instrument and cover it with a cloth or plastic paper to prevent from dust.



Pull the connector plug from the jack at once in the following cases, and contact the vendor:

- There is some liquid flowing into the Instrument;
- Drenched or fire burned.
- Abnormal operation: such as abnormal sound or smell.
- Instrument dropping or outer shell damaged.
- The function has obviously changed.

3. The maintenance of Instrument

The rotor should be cleaned by the cloth stained with a little alcohol. If there are smutches on the Instrument, clean them by soft cloth stained with cleaning cream.

Chapter 1 Introduction

Biological sample homogeneous instrument is based on the strong shock force which produced by the high-speed revolution of eccentric shaft to make the steel bead or magnetic bead powerfully collide with the sample, and the sample will be grinded to powder. It is able to extract the Nucleic Acids rapidly from any source (soil, tissue and organ of plant/animal, bacteria, spore etc.).

Features:

- Beautiful and clear operation interface.
- Small volume and light weight.
- The fashion appearance.
- Multiple grinding tubes are available.
- Linear velocity can be adjusted optional.

Chapter 2 Specifications

1. Normal operation conditions:

Ambient temperature: 5 C 35 C

The relative humidity: ≤70%

Power: 24VDC 6A

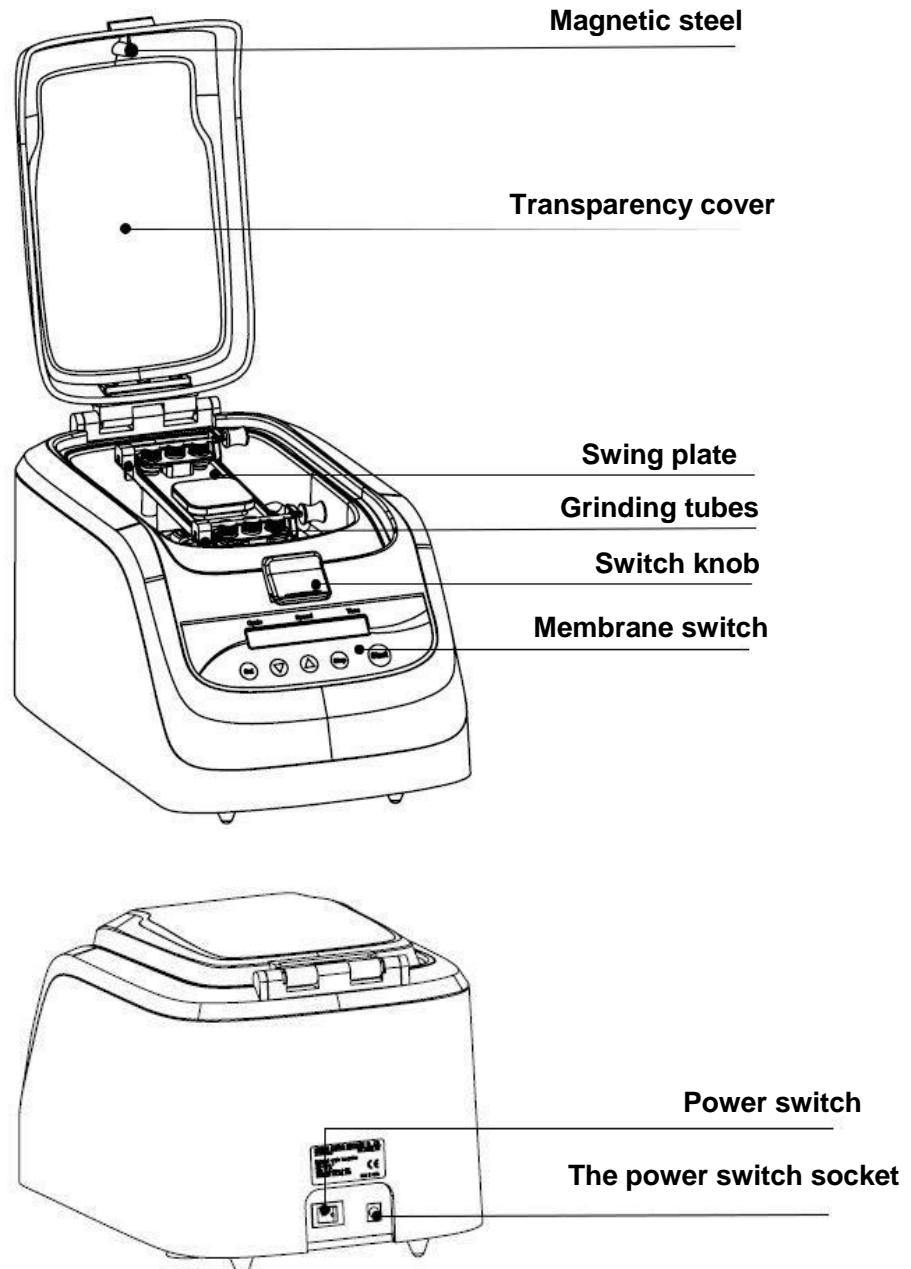
2. The basic parameters and characteristics

Parameter \ Type	Bioprep-6
Display	LCD
Sample quantity	6 * 2ml tubes/ 2 * 5ml tubes
Cycle duration	1s~ 90s, increased by step 1s.
Pause	1s~ 90s, increased by step 1s.
Speed	4.00m/s~7.00m/s(2500~4350rpm), increased by step 0.05m/s.
Acceleration time	≤2s
Deceleration time	≤2s
Programs	10
Noise	≤65db
Temperature	5~35°C
Input power	144W
Adapter	24VDC 6A
Dimension(WXDXH)	354mm×218mm×206mm
Weight (kg)	8.9kg

Chapter 3 Basic instructions

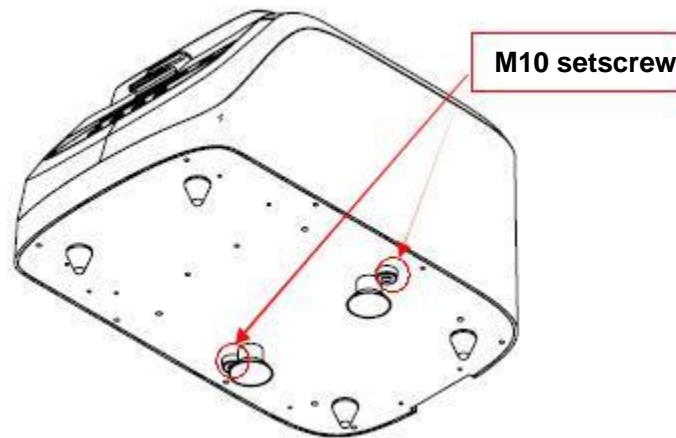
This chapter focuses on the introductions of the structure, operation keys, and displays of the instrument, as well as preparatory work before starting. Please read this chapter before starting when use this instrument for the first time.

1. Structure overview



2. Installation and experiment considerations

2.1 The transportation lock must be dismantled when open the carton.



Use the M10 socket head wrench to take out the two M10x85 setscrew on the bottom of the instrument as picture above.

2.2 The adapter installation

Connect one hand of the adapter with power socket of the instrument and the other hand with the outlet of 100-240VAC 50/60Hz 200VA.

2.3 Experiment consideration

2.3.1 The sample tubes must be placed symmetrically, if there is only one (the other side must be placed a same weight tube to keep balance) or two samples should be placed as Fig 2.1. If there are more than two samples should be placed as Fig 2.2, the third and fifth sample port is also placed a same weight tube to keep balance.

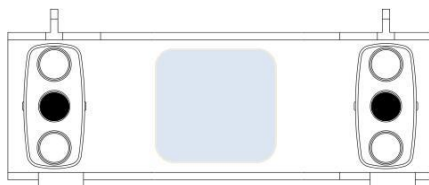


Fig 2.1



Fig 2.2

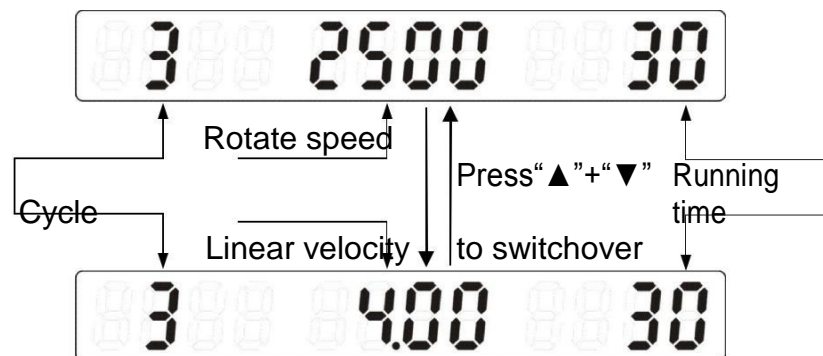
2.3.2 Make sure the grinding tubes are tightly pressed and the transparency cover is closed before running.

Chapter 4 Operation Guide


1. Operation panel and the screen sketch





Screen sketch




2. Operation button introduction

 : Press it to enter the setting interface and set the parameter.

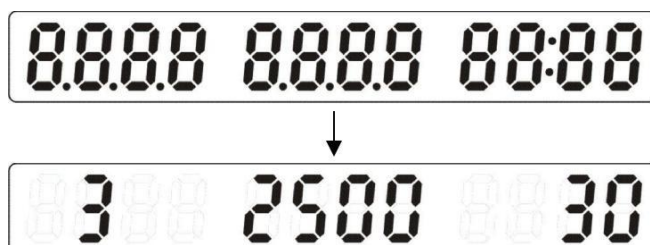
 : Press to set the parameter.

 : Press it to stop the running program.

 : After setting, press it to run.

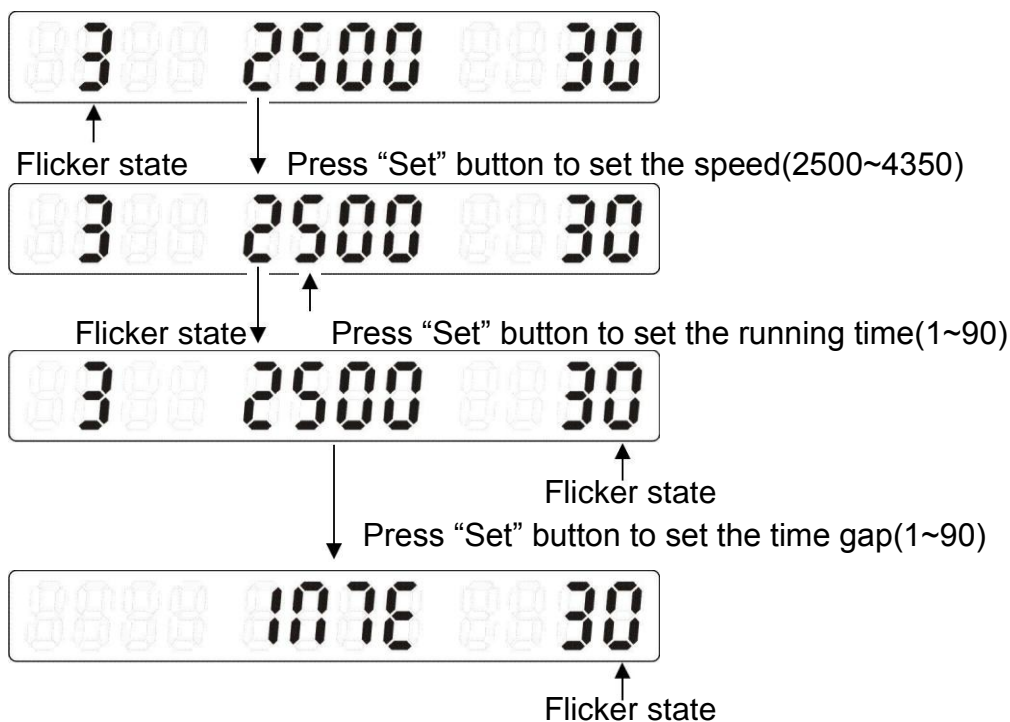
3. System checking

Turn on the instrument and enter the initial state, after 3 times flickers, the main interface will display the cycle number, rotate speed and running time(factory default), if it isn't the first time to be turned on, the screen will display the parameter of the last running.



4. Setting interface

4.1 Press "Set" button to enter the setting interface and the cycle number(1~10) will flicker, press "▲" or "▼" to set the cycle number.



Then press the "Set" button back to the cycle number setting state, if there is no operation within 3 second, it will autosave and quit the setting interface. Press "Start" button to run the program.

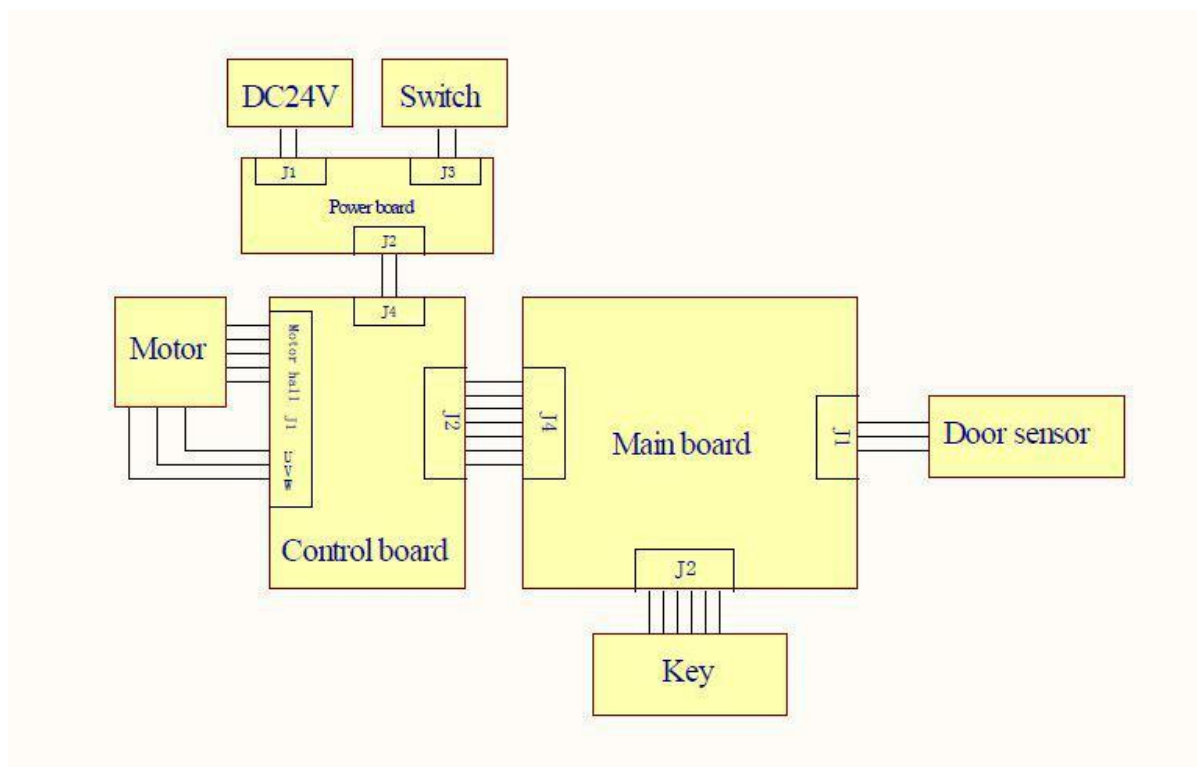
4.2 Press the "▲"+"▼" button to get into the linear velocity display interface and then press "Set" button to set the linear velocity(4.00m/s~7.00m/s, increased by step 0.05m/s), setting method as 4.1. Press the "▲"+"▼" button again to back to the previous interface.

Chapter 5 Troubleshooting Guide

Problems and actions

No.	Common problem	Possible cause	Action(s)
1	No display on the screen	No power on the main power plug	Check the power supply and plugged properly
		On/Off button broken	Change button
		Others	Contact suppliers
2	Velocity measurement inaccurate	Sensor broken	Contact suppliers
		Electric motor broken	
3	No alarm when the cover open when running	Sensor broken	Contact suppliers
4	“E101” displayed with alarming “Du...”	Overspeed alarm	Contact suppliers
5	“E104” displayed with alarming “Du...”	Locked-rotor alarm	Contact suppliers
6	“E501” displayed with alarming “Du...”	Cover open when running	Stop running and close the cover
7	“E503” displayed with alarming “Du...”	Cover didn't close before running	Close the cover
8	Buttons don't work	Faulty buttons	Contact suppliers

Wiring Diagram for Bioprep-6 Homogenizer



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