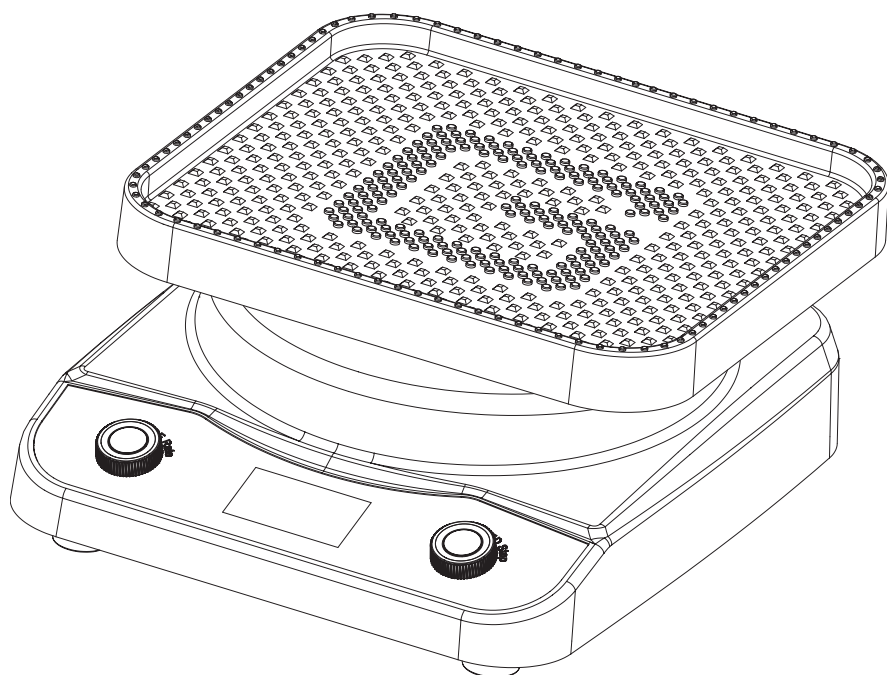


Decoloring Shaker

DS-3D100 (3D Combination Mode)



INSTRUCTIONS

Read the instructions carefully before using the product and keep it in a safe place for reference.

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01 Description

This product is widely used in electrophoresis experiments, such as coomassie bright blue staining and decolorization of gel (G2059) can effectively improve the efficiency of staining and decolorization. Use cooperatively with Servicebio biological antibody incubator (G6019-9), it can greatly reduce the amount of antibody used during WB antibody incubation, so that antisource antibody can fully bind. In addition, it can also be applied to the film rinsing in WB experiment and slide washing in IHC/IF experiment etc. It can also be used for cell culture and cell membrane transfer.

Advantages

Mode selection function

Different oscillating modes (horizontal mode,pendulum mode, and combination mode) can be adjusted according to different experimental requirements.

Automatic leveling function

Automatic leveling when shutdown.

Compound motion speed ratio adjustment function

The speed ratio of 3D motion can be adjusted, and the mixing and oscillation frequency can be adjusted according to different experimental requirements,Which can make 3D mixing effect more efficient and intuitive.

Timing function

The operation time can be set according to the requirements of the experiment, the tray will automatic leveling when shutdown.

Power failure memory function

Sudden outages can remember the mode, speed, frequency and time of operation before the outage. Automatic continuation of operation after power recovery.

Blocking protection function

When the load is overweight or unbalanced, the shaker will automatically stop operation and alarm. Restart operation after removing overload or balancing load.

Fault locking function

When a fault occurs, the equipment will alarm and lock, display the fault symbol E01, the logo flashes, and the button fails. At this time, press the power switch to power off and restart. If it can operate normally, it is locked rotor protection. If it is still locked after restart, it needs maintenance.

02 Technical Parameters/Notes

Thank you for purchasing this product. In order to allow you to fully enjoy the full range of services from Sevicebio, please read this manual and related illustrations carefully before using this product.

Technical Parameters

Products name	Decoloring Shaker
Model	DS3D100 3D composite shaker
Power	35W
Voltage	100V~240V 50Hz/60Hz
Worktop	338mm*308mm
Max load	5Kg
Rotational speed	Horizontal mode : 5-100 rpm , radius of rotation: 15mm Pendulum mode 5-100 rpm, Swinging angle: 10°C 3D composite mode: 5-100 rpm , speed ratio: 1%-100%(Ratio of z-axis pendulum speed to XY plane reciprocating speed)
Dimension	380*330*180mm
Tray size	338*308mm
N.W	9.5Kg

Attention

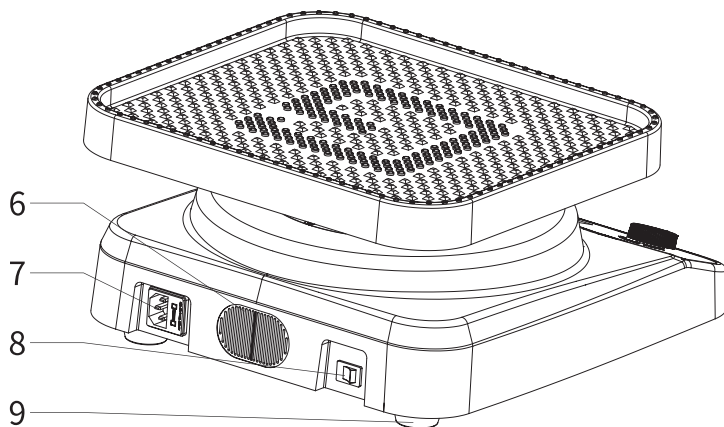
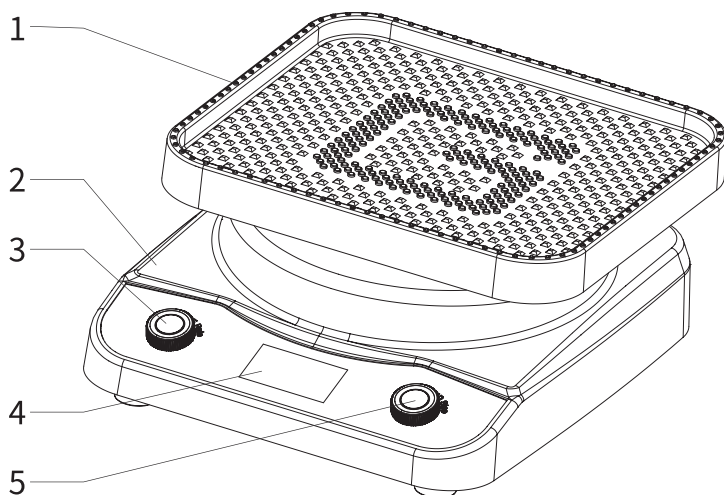
Never put the power cord or plug in water or any other liquid.

Warning

---Consequences caused by not following the instructions are not covered by warranty.
Always place the destaining shaker on a flat, stable, heat-resistant work surface.
If you find that the decoloring shaker is not working properly, please unplug it immediately.
Do not pull on the power cord, and take special care when pulling the power plug.
Do not move the decoloring shaker while it is working.
Turn off the power switch and unplug the power plug when not in use for a long time.
-If there is any residual liquid in the tray, it is recommended to clean it up immediately.
It is forbidden to use the shaker when the power cord or plug is damaged. To avoid danger, please contact Sevicebio service center for replacement or repair.
Decolorization shaker is a precision instrument. Pay attention to moisture-proof, fall prevention and antifreeze during use.

03 About DS-3D100-Functions

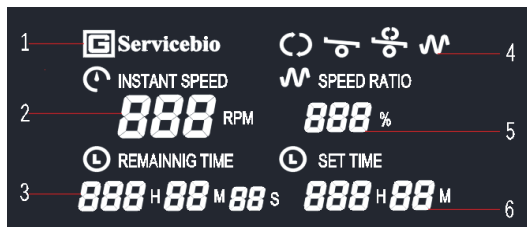
Main structure & functional instructions



- | | |
|---|------------------|
| 1) Tray | 6) Exhaust hoods |
| 2) Main body | 7) Power socket |
| 3) Mode & time adjustment knob | 8) Power switch |
| 4) Optical display | 9) Rubber base |
| 5) Speed and start/stop adjustment knob | |

03 About DS-3D100-Display & Interface

Guidance on the content of the screen



- 1 .Operating status
- 2 .Speed
- 3 .Time
- 4 .Mode
- 5 .Compound speed ratio
- 6 .Timmer settings

Operating status

When running, the pattern in front of the logo and the letters behind it flash in turn, resulting in a running light effect.

Speed

Displays the current speed of the shaker, and "0" when the shaker is not working.

Time

Displays the remaining time to complete the work, and when the seconds display the countdown, it means that the work is in process.

Operation mode

Displays the mode in which the shaker is currently

Compound motion speed ratio

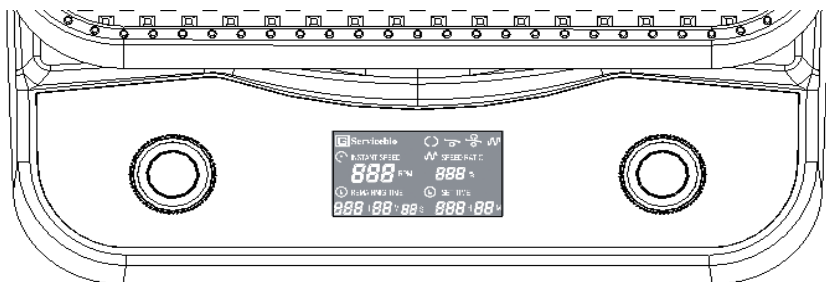
Displays the speed ratio for operation in 3D mode, available only in 3D mode.

Timer setting display

Displays the preset operating time of the shaker.





03 About DS-3D100-Control & Buttons

Buttons



- 1) Left button, mode+time+speed ratio adjustment knob
- 2) Right button, speed + start + pause adjustment knob

Left button, mode+time+speed ratio adjustment knob

- a) Press this button in standby or pause state to enter the mode cycle adjustment settings, press 1 time - Horizontal , press 2 times --Pendulum , press 3 times--3D , long press for three seconds to start the speed ratio adjustment function .
- b) Press the right button to pause and then rotate this button to adjust the countdown setting when the product is running.
- c) Press and hold this knob for 3 seconds to activate the speed ratio adjustment function then turn this knob to adjust the 3d motion speed ratio.

Right button, speed + start + pause adjustment knob

- a) Press this button in standby or pause to start operation.
- b) Press this button to stop the operation when it is working.
- c) Turn this knob in standby or during working to adjust the operating speed.

03 About DS-3D100-Control & Buttons

Control

Horizontal Working Mode

Left button to select this mode and press the right button to start the operation. In this mode, the tray will do reciprocating motion horizontally, the speed frequency is 5-100rpm, and the rotation diameter is 30mm.

Pendulum Working Mode

Left button to select this mode and press the right button to start operation. In this mode, the tray will do left and right swinging motion with speed frequency 5-100rpm and swinging angle 10 degrees.

3D composite mode

Left button to select this mode and then press the right button to start the operation. The tray makes 3D compound motion in this mode, with a speed frequency of 5-100rpm.

Speed Ratio Adjustment

In the 3D composite operation mode, first press the right pause button, then long press the left button for 3 seconds to start the 3D composite speed ratio adjustment function, and then rotate the left button to adjust the 3D composite movement speed ratio, the adjustment range is 1%-100%

Attention: The speed ratio adjustment function is only available for the 3D composite operating mode.

04 Use of products- operating Instructions

Power Up Operation

- 1) Plug the power cord plug into the socket at the rear side of the product.
- 2) Plug the power cord triangular plug into an AC outlet.
- 3) Press the rocker switch to turn on the power, a beeping sound and then LCD screen lights up.

Operating mode setting

In standby, the last used operating mode as default, at this point press the left button to switch modes, press 1st time as horizontal mode, 2nd time as horizontal mode then 3rd time as 3D composite mode. Pattern Repeats.

Operating time setting

In standby, rotate the left button to adjust the timing value, clockwise time increment, and vice versa.

3D speed ratio setting

In standby mode, press and hold the left button for 3 seconds to switch to the 3d speed ratio adjustment function, and then rotate the left button to set the speed ratio.

Operating speed settings

The running speed can be adjusted by turning the right button in standby or during operation, with the clockwise speed value increasing and vice versa.

Start/Stop setting

Press the right button once in standby to start running, then press again to stop running. If you want to change the mode/time/speed ratio setting during operation, you need to press the right button to stop the operation, and then follow the previous steps to set the relevant settings, and press the right button to start the operation again.

Power failure memory

If the power is interrupted during the operation, the program will remember the experimental parameters (operation mode, time, speed, etc.) set before the power is interrupted, and the shaker will automatically run after the power is restored and immediately according to the parameters set before the power is interrupted.

Blocking protection

During operating, The shaker will activate the blocking protection function and stop operation with a buzzer alarm if overweight or unbalanced During the operating.. Operation can be restarted after the overweight is removed and the item is set balanced.If it is still locked after restart, and the fault attached number E01 is displayed, and the logo flashes, it is a fault lock. Please contact after-sales maintenance for treatment.

Automatic leveling shutdown

when pressing the stop knob during operation,there will a automatic leveling function,This process needs to last for several seconds.During this process, the buzzer rings and no response is made to any operation. The operation can not be carried out until the automatic leveling is completed, the tray stops at the level and there is a "dee" sound.

05 Warranty and Service

Warranty and Service

If there is any damage to the instrument or accessories during the warranty period, we are responsible for free repair or replacement of the damaged parts. Except damage caused by:

1. Damage caused by improper use.
2. Maintenance or modification not performed by us.
3. Replace with parts not produced or authorized by us.
4. Contamination and corrosion caused by improper reagents, solvents or samples

If you need more services, please visit Servicebio official website or call our service hotline: +86 4006-027-178 +86 027-51113188

Product Name	
Model	
Date of purchase	
Address	
Products ID	
Product quality feedback	

Free hotline

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