Rocking Shaker & 3D Shaker

User Manual



SK-R330-ProLCD Digital Rocking ShakerSK-D3307-ProLCD Digital 3D ShakerSK-D3309-ProLCD Digital 3D Shaker

Please read the User Manual carefully before use, and follow all operating and safety instructions!

Technical specifications and outline are subject to change without prior notice. www.dlabsci.com



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Preface

Welcome to the "Rocking Shaker & 3D Shaker User Manual". Users should read this manual carefully, follow the instructions and procedures, and beware of all the cautions when using this instrument.

Service

When help needed, you can always contact the service department of manufacturer for technical support in the following ways:

DLAB Scientific Instrument Inc.

2311 E. Locust Court, Ontario, CA 91761 United States. Office: +1-747-230-5179 Fax: +1-909-230-5275 Sales contact: info@dlabsci.com Service contact: service@dlabsci.com www.dlabsci.com Please provide the customer care representative with the following information:

- Serial number (on the rear panel)
- Certification
- Description of problem (i.e., hardware or software)
- Methods and procedures adopted to resolve the problems
- Your contact information

Warranty

This instrument is warranted to be free from defects in materials and workmanship under normal use and service, for a period of 24 months from the date of invoice. The warranty is extended only to the original purchaser. It shall not apply to any product or parts which have been damaged on account of improper installation, improper connections, misuse, accident or abnormal conditions of operation.

For claims under the warranty please contact your local supplier. You may also send the instrument directly to manufacturer, enclosing the invoice copy and by giving reasons for the claim.

1. Safety Instructions

Warning!

- Read the operating instructions carefully before use.
 - Ensure that only trained staff works with the instrument.

Protective ground contact!

- Ensure the socket must be grounded (protective ground contact) before use.
- When working wear personal safety guards to avoid the risk of:
 - Splashing liquids
 - Broken glass containers
- Follow the safety instructions, guidelines and accident prevention regulations.
- Do not touch the running parts, moving instrument care not rolling your fingers.
- Set up the instrument in a spacious area on a stable, clean, non-slip, dry and fireproof surface. Do not operate the instrument in explosive atmospheres, with hazardous substances or under water.

- If the instrument does not run smoothly, please decrease the motor speed.
- Firmly secure the accessories and vessels in place to avoid damage or risk.
- Preparation of samples may lead to dangerous flammable. Only process samples that will not react dangerous.
- Use the standard accessories listed in the "accessories" section, and follow the instructions to use accessories to ensure safety. Please switch off the power before assembly of accessories, confirm the instrument and accessories are intact before switch on each time.
- The instrument only be opened by expert, please switch off before use.
- The voltage stated on the nameplate must correspond to the mains voltage.
- Do not cover the instrument during running. Prevent the collision and extrusion to instrument and accessories.
- Keep away from high magnetic field.

2. Proper Use

The instrument is designed for mixing sticky substance in schools, laboratories or factories. It can be installed on a variety of impeller, for different viscosity of the medium. This instrument is not suitable for using in residential areas or other constraints mentioned in Chapter 1.

Do not use the accessories recommended by the manufacturer, or failure to use the instructions, may be caused unsafe situation.

3. Inspection

3.1 Receiving Inspection

Unpack the instrument carefully and check for any damages which may have arisen during transport. If it happens, please contact manufacturer/supplier for technical support.



Note:

If there is any apparent damage to the system, please do not connect to the power line.

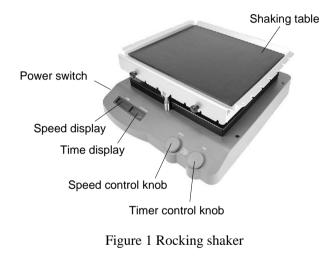
3.2 Listing of Items

Main unit Power cable	Qty
	1
TT 1	1
User manual	1

Table 1

4. Control and Display

4.1 Control



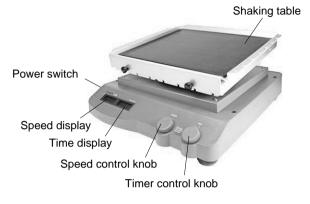


Figure	2	3D	shaker
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Items	Descriptions			
Speed control	Set target speed. Push on/off the knob to			
knob	start/stop the shaking function.			
Timer control	rol Set target time. Push on/off the knob to			
knob	start/stop the shaking function.			
Speed display	Display the set and real speed values.			
Time display	Display the set and remain time values.			
Power switch	Switch ON/OFF instrument.			
TE 11 0				

Table 2

4.2 Display



Figure 3

Display	Descriptions			
Set	Display when set target value.			
Err	Display in case of error happening.			
Display area	When Set display, this area shows setting value; When Set disappears, this			
	area shows running value.			

Table 3

5. Operation

- Place the instrument in safe and stable surface, ensure the required operating voltage and power supply voltage matched, and the socket must be earthed reliably.
- Connect the power cable.
- Switch ON instrument.

- The instrument begins self-checking.
- When initialization is over, LCD displays the last running values of speed.
- Rotate the speed control knob to set target speed.

a. Press the speed control knob to start shaking function. Press the speed control knob again to stop shaking function.

b. Rotate the timer control knob to set target time. Press the timer control button to start shaking function at the set speed and time. During operation, motion can be stopped at any time by pressing the speed control knob or timer control knob. If the timer control knob is pressed again, the shaking function will start again and the timer will restart countdown. When the timer reaches zero, the unit will be automatically halted and an alert will sound.

If these operations above are normal, the instrument is ready to operate. If not, the instrument may be damaged during transportation, please contact technical support of manufacturer/supplier.

Note:

The speed value can be altered during shaking.

6. Faults

- When switched ON, the instrument does not work.
 - Check whether the power cable is connected.
 - Check whether the fuse is broken.
- Shaking function suddenly stop. ٠
 - LCD displays "Er 03", indicate the current failure is "overload protection".
 - Pressing the speed control knob or timer control knob first to close shaking function, and then restart shaking function after lowered load. If shaking function cannot start, then repeat the process and gradually reduce load.

7. Maintenance and Cleaning

- Proper maintenance can keep instrument working properly and lengthen its lifetime.
- Do not spray cleanser into the instrument when ٠ cleaning.
- Do not remove the power line when cleaning. Only use recommended cleansers:

Dyes	Isopropyl alcohol					
Construction	Water containing tenside /					
materials	Isopropyl alcohol					
Cosmetics	Water containing tenside /					
	Isopropyl alcohol					
Foodstuffs	Water containing tenside					
Fuels	Water containing tenside					

Before using other method for cleaning or decontamination, the user must ascertain with the manufacturer that this method will not damage the instrument. Wear the proper protective gloves during cleaning of the instrument.



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Note:

- Electronic device cannot clean with cleanser.
- If you require maintenance service, must be ٠ cleaned the instrument in advance to avoid pollution of hazardous substances, and to send back into original packing.
- If the instrument will not use for a long time, ٠ please switch off and place in a dry, clean, room temperature and stable location.

8. Associated standards and regulations

Construction in accordance with the following safety standards:

EN 61010-1

UL 3101-1

CAN/CSA C22.2(1010-1)

EN 61010-2-10

Construction in accordance with the following EMC standards:

EN 61326-1

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

9. Specifications			Items	Specifications			
				Rocking shaker	3D shaker		
Items	Specifications		Overall				
Items	Rocking shaker	SD Sliakel	Dimensions	360×420×155	430×360×106		
Voltage [VAC]							
Frequency			Weight [kg]	12	9		
[Hz]	50/60	50/60	Permissible	5-40	5-40		
Power [W]	40	50	ambient temperature				
Tile Angel [^o]	9	7,9	[°C]				
Max. Shaking	7	5	Permissible	80%	80%		
Weight [kg]		5	relative				
Motor Type	DC motor	DC motor	humidity				
Speed range	10-70	10-70	Protection	IP21	IP21		
[rpm]	10-70	10-70	class acc. to				
Speed display	LCD	LCD	DIN EN60529				
Timer range	1-1199	1-1199		Table 4			
[min]	1-1199	1-1177					
Timer display	LCD	LCD					
Run type	Timer/Continuous	Timer/Continuous					
Kun type	operation	operation					

10.Orderin	g Informations	834210217777	SK-D3307-Pro, LCD Digital 3D Shaker , angle 7°, Euro plug, 100V-240V, 50Hz/60Hz	
Cat. No.	Descriptions SK-R330-Pro, LCD Digital Rocking	834210317777	SK-D3307-Pro, LCD Digital 3D Shaker , angle 7 °, UK plug, 100V-240V, 50Hz/60Hz	
833210017777 833210117777	Shaker , see-saw wave, angle 9°, USplug, 100V-240V, 50Hz/60HzSK-R330-Pro, LCD Digital RockingShaker , see-saw wave, angle 9°, Cnplug, 100V-240V, 50Hz/60HzSK-R330-Pro, LCD Digital RockingShaker , see-saw wave, angle 9°, Euro	834220017777	SK-D3309-Pro, LCD Digital 3I Shaker , angle 9 °, US plug, 100V-240V 50Hz/60Hz	
833210217777		834220117777	SK-D3309-Pro, LCD Digital 3D Shaker , angle 9 °, Cn plug, 100V-240V, 50Hz/60Hz	
833210317777	plug, 100V-240V, 50Hz/60Hz SK-R330-Pro, LCD Digital Rocking Shaker , see-saw wave, angle 9 °, UK	834220217777	SK-D3309-Pro,LCDDigital3DShaker,angle9°,Europlug,100V-240V,50Hz/60Hz	
834210017777	Shaker , angle 7 °, US plug, 100V-240V, 50Hz/60HzSK-D3307-Pro, LCD Digital 3DShaker , angle 7 °, US plug, 100V-240V,	834220317777	SK-D3309-Pro,LCDDigital3DShaker,angle9 °,UKplug,100V-240V,50Hz/60Hz	
834210117777	50Hz/60HzSK-D3307-Pro,LCDDigital3DShaker , angle 7 °, Cn plug, 100V-240V,			
	50Hz/60Hz			

Accessories			 Cat. No.	Descriptions
	Cat. No.	DescriptionsSK330.5 Dish plateform with non-slip mat and fixed string	18900031	SK180.2.3/SK330.2.3 Fixing clip for flask volume 100 ml
	18900027	(8 pcs) SK330.1 Universal attachment	18900032	SK180.2.4/SK330.2.4 Fixing clip for flask volume 200/250 ml
	18900028	SK330.2 Fixing clip attachment	18900033	SK180.2.5/SK330.2.5 Fixing clip for flask volume 500 ml
All is a	18900040	SK330.3 Lengthways roller Attachment	18900036	Bar for SK330.1 Universal attachment, black
R	18900029	SK180.2.1/ SK330.2.1 Fixing clip for flask volume 25 ml	Ta	ible 5
R	18900030	SK180.2.2/ SK330.2.2 Fixing clip for flask volume 50 ml		



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