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Preface

Welcome to the Safevac Aspiration System guide. Please read the operation manual carefully before using the instrument, pay attention to the safety precautions and follow the instructions and operation specifications.

How to Get Help

If you encounter any problems during installing and using, please get in touch with your local SLS Sales office.

Contact details as follow:

Scientific Laboratory Supplies Ltd Wilford Industrial Estate Ruddington Lane Wilford Nottingham NG11 7EP

United Kingdom:

Tel:+44(0) 115 982 1111 www.scientificlabs.co.uk

Republic of Ireland:

Tel: +353(0) 1 4069464 www.scientificlabs.ie

International:

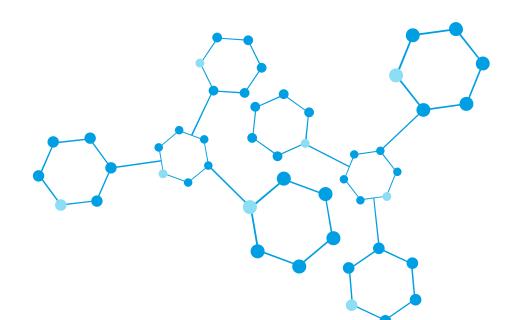
Tel: +44(0) 115 977 5060 www.scientificlabs.com

Please prepare the following information:

- Product serial number (instrument nameplate)
- Warranty Card
- Description of problem
- Actions which you have done to solve the problem
- Your phone, fax and Email address and other contact information

Warranty

We guarantee a our SLS Lab Pro aspirators for a 12 month warranty period under normal use.





1. Safety Precautions



Caveat!

- Please read manual carefully before operating the instrument and follow all safety norms
- Train the person before operating the instrument



Safety grounding protection!

- Be sure the power outlet is properly grounded before power on the instrument
- When running the instrument, wear suitable protective garment to ensure staff safety
- Put the instrument in a wide and airy place, and ensure surfaces are clean, non-slip, dry and fireproof. Do not operate the instrument outside, close to water or hazardous substances
- Avoid using unsafe containers
- Make sure the power supply voltage is consistent with the requirements of the label and the instrument and its accessories are not damaged
- Before running the instrument each time, check "Accessories" listed and install accessories in accordance with the instructions to ensure safety. Accessories must be firmly connected to the instrument and avoid detachment

- During running, avoid touching valves, injection pumps, piping and other components. Also, do not move the product
- If the liquid accidentally spills out, shut down immediately and wipe off the liquid and clean organic solvent to guarantee the necessary security
- Only unplug the instrument when it has fully powered down
- Be sure only professionally trained personal open the instrument
- No other heavy objects can be on the equipment

2. Range of application

This instrument is for schools, laboratories and factories, and other application environments designed for liquid dilution and distribution as following environment:

- No more than 2000 metres above sea level
- Temperature at 0°C to 40°C
- Installation type: product is designed to connect the indoor outlet, voltage fluctuations not exceeding ± 10% of normal
- Inter-instrument, the minimum distance to the wall is 100mm.
 The instrument is not suitable for application in residential areas as well as some of the restrictions specified in Chapter 1



3. Inspection

3.1 Unpacking

Any packaging damage when you receive, please record. Upon arrival make a note of any damage to the packaging.



Note!

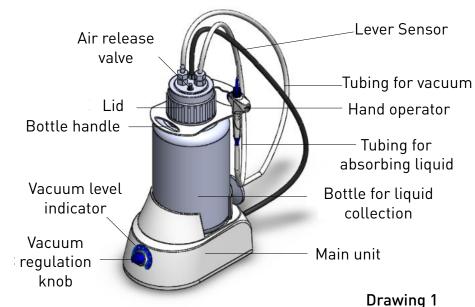
If there is any visible damage on the instrument, do not connect with power.

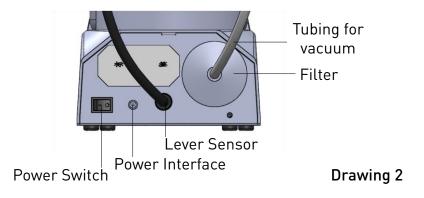
3.2 Packing List

Name	Quantity
Host computer	1
Waste container	1
Pipette	1
Aspiration handle	1
Vacuuming	1
Power Adapter	1
Instructions	1

Table 1

4. Structure







Host computer	The main part of the instrument, vacuum pump inside.
Waste container	Used for storing liquid waste.
Waste lid	Push-in fitting with the piping, level sensor interface and release valve. Corresponding plug into the corresponding interface of the lid to ensure connections are tight. Quick plug for fast sealing of the pipeline, when unplugged, press and hold the metal shrapnel to remove the pipe.
Aspiration handle	Press and hold the button on the handle for fluid suction, the operator can use the correct pipette adapter to draw up the sample.
Level Sensors	Detecting the level of waste liquid containers. When the level exceeds the warning, the pump alarm sounds. The sensor will detect the level of the waste liquid. It will shut down the pump if the liquid waste is out of the safe level.
Vacuuming road	Waste container with a vacuum pump connected to the host, provide a negative pressure environment. This tube used to transport liquid waste from the operation handle.

Suction line	Waste container is connected with aspiration handle, the suction line draws liquid via the vaccum pump into the container.
Multipurpose Bracket	Installed between the waste container and the cap can be placed by aspiration handle, while moving the waste containers can be used as a handle.
Release valve	Screw off the device to release the vacuum degree of waste containers and balance the air pressure of inside and outside waste container.
Vacuum level indicator	Indicate the degree of vacuum, steady light means reached the set vacuum, flashing means adjusting to vacuum level setting.
Vacuum adjusting knob	Adjust the desired degree of vacuum.
Filter	Connected with the host and waste containers to prevent the liquid from entering the vacuum pump.
Power Interface	Power Interface.
Switch	Turns the Host on or off

Table 2



5. Operating

- 1. Piping installation as above shown to ensure the pipeline connected, no leakage.
- 2. Make sure the discharge valve is closed.
- 3. Turn the power switch.
- 4. Vacuum regulator knob clockwise, when the light is on, set the vacuum level.
- 5. The light will become steady indicating that the system has reached the desired vacuum. indicating that the system has reached the set value the degree of vacuum, pressing the handle button, you can then contact with the liquid suction waste container.
- 6. Shut down the system.
- 7. Loosen the bleed valve, you can reset the vacuum degree.
- 8. Remove the waste container, unscrew the lid waste, discard.

6. Failure diagnosis

- Instruments can't start when power on
 - Check whether the power line is unplugged
 - Check whether the fuse is broken or loose
- Self test is abnormal when power on

- Switch OFF the unit, then reset
- Unit cannot be powered off when switched off

If these faults are not resolved, please contact manufacturer/supplier.

7. Maintenance and Cleaning

- Proper maintenance can keep instruments working properly and prolong its lifetime
- Do not spray cleanser into the instrument when cleaning
- Unplug the power line when cleaning
- Only use recommended cleansers:

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

- Wear the proper protective gloves during cleaning of the instrument
- Before using other method for cleaning or decontamination, please check with the manufacturer that this method will not harm the instrument



- Before shipping for repair, please pack the instrument with the original carton
- If you will not use the instrument, please switch off the power and place it in dry, clean, normal temperature, stable environment



Warning!

Cut off power when maintenance and cleaning.

Related Standards

Instrument structure conforms to the following safety standards

EN 61010-1 UL 3101-1 CAN/CSA C22.2(1010-1) EN 61010-2-10

Instrument structure conforms to the following EMC standards

EN 61326-1

Comply with the following European standards

EMC Standard: 2004/108/EC

Mechanical Design Standard: 73/023/EWG

8. Specifications

Voltage	100 – 240 VAC, 50/60 Hz
Vacuum range	-300 to -600 mbar (adjustable)
Pumping speed	8 L/min (air)
Aspiration rate	17 ml/s (aspiration pipette)
Noise	< 50 dB(A) (1 Metre)
Size (H x W x D)	53 x 18 x 32 cm (for reference)
Weight	3.4 kg (for reference)

Table 3

9. Ordering information

Code	Description
SLS4950	SLS Lab Pro Safevac Vacuum Aspiration System

