

SCIOLOGEX Vacuum Aspiration Systems

User manual

4L Vacuum Aspiration System with Quick-Release Cap

2L Vacuum Aspiration System with Barbe Tube Fittings Cap

Contents

Contents	2
Product Description	3
Repair Service	3
Warranty Information	4
1. Safety Information	5
2. Inspection, Package contents	6
2.1 Unpacking	6
2.2 Packing List	6
3. Product Overview	7
4. Operation	9
8. Maintenance, Care, and Safety	10
9. Troubleshooting	12
10. Specifications	13

Product Description

Thank you for your recent purchase of this Vacuum System. The 4L Vacuum Aspiration System/2L Vacuum Aspiration System is a vacuum system with an integral pump and adjustable, electronic vacuum controller for laboratory use.

The instrument should not be used for applications other than those specified.

Repair Service

If Should the 4L Vacuum Aspiration System/2L Vacuum Aspiration System require service or repair, please contact Supplier Customer Service. A Return Authorization Number will be issued and customer will be advised on proper packing and method of shipment.

Warranty

This 4L Vacuum Aspiration System/2L Vacuum Aspiration System Vacuum Aspiration System is warranted to be free of defects in materials and workmanship

for a period of 24 months from date of purchase, provided that:

- The unit has not been opened or attempted to be opened by the end user
- The user ensures that it has been carefully cleaned and decontaminated
- The unit has been operated according to the instructions and not in any improper way

Should warranty service be required, repair or replacement will be provided by supplier

without charge. Freight charges for shipping unit to supplier will be responsibility of purchaser.

2. Inspection

2.1 Unpacking

After unpacking, please contact supplier if you find any damage to content.



Note:

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

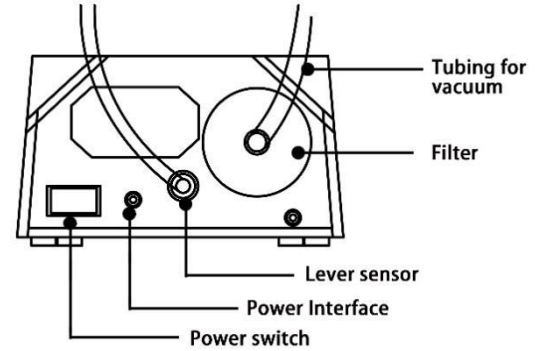
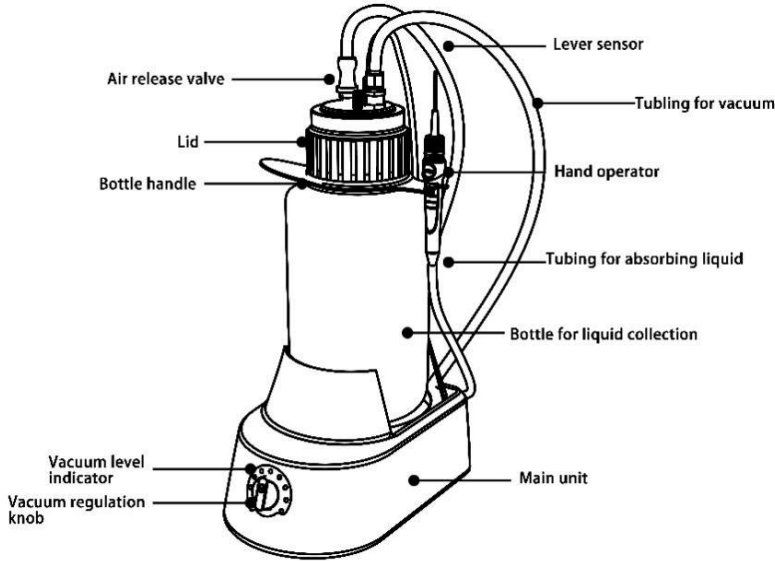
2.2 Package Contents

Description	Quantity
base unit	1
Vacuum Bottle: 2L or 4L depending on model	1
Hand Operator Bracket	1
Cap: Quick Release Couplings Cap or Barbed Fittings Cap depending on model	1
Tubing for Connection of Base to Cap	1
Tubing for Connection from Cap to Hand Operator	1
Aspiration handle	1

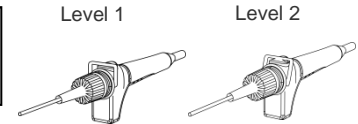
Adapter with Ejection Device, Single-Channel, 1.0mL tip	1
Adapter with Ejection Device, Single-Channel, 200uL tip	1
Adapter, Eight-Channel Needle, Stainless Steel	1
Adapter with Ejection Device, EightChannel	1
Adapter, Single-Channel Needle, Stainless Steel (4 sizes)	4
Handle Hoop	1
Power Adapter 100V-220V, 50Hz/60Hz for EU, UK, North America (3)	1
Level Detection Sensor cable only with the 4L Vacuum Aspiration System	1

3. Product Overview

Model 4L Vacuum Aspiration System

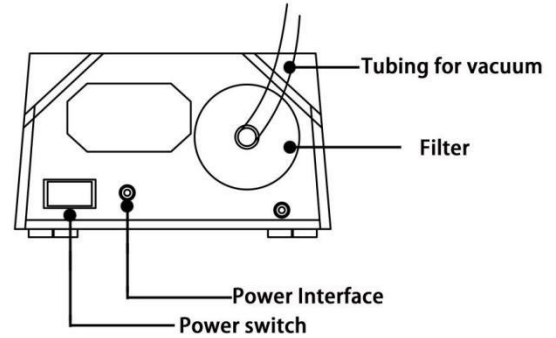
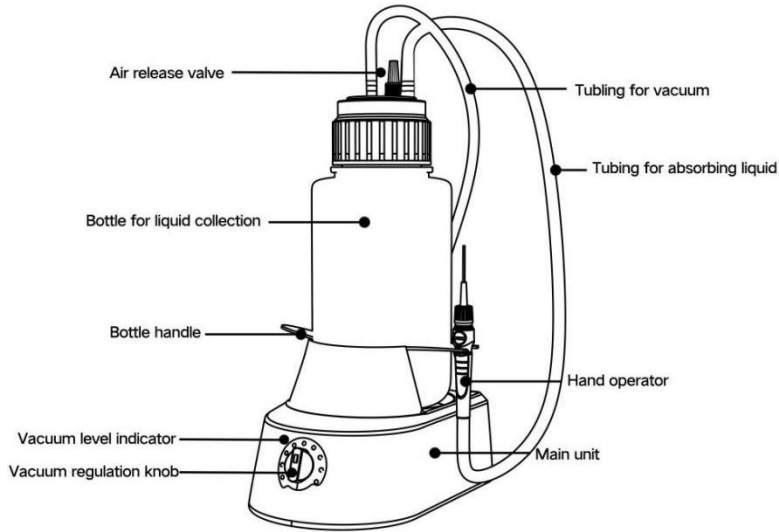


**Handle
continuous
Dispensing mode**



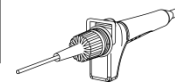
30% increase in aspiration rate

Model 2L Vacuum Aspiration System



**Handle
continuous
Dispensing mode**

Level 1



Level 2



*30% increase in
aspiration rate*

4. Getting Started

Please ensure that all packaging materials have been removed before using the 4L Vacuum Aspiration System. Place the 4L Vacuum Aspiration System unit on a dry, level, dust-free location. Power Supply Connection

- Plug the mains adapter into a standard electrical source and connect to the 4L Vacuum Aspiration System.

5. Operating the 4L Vacuum Aspiration System/2L Vacuum Aspiration System Vacuum Aspiration System

Preparing Vacuum Bottle

- Fit lid with quick release couplings onto bottle. Ensure that lid is firmly attached.

Connecting Vacuum Bottle to Instrument

- Connect filter with short tube to the instrument base and connect other tube end to the bottle cap coupling.

Connecting Vacuum Bottle to Hand Operator

- Connect other tube with coupling from bottle cap to hand operator.

Connecting the Level Detection Sensor Cable

- Connect level detection sensor cable to the instrument base and connect other end to bottle cap

6. Operation

Please read the following notes before attempting to operate the 4L Vacuum Aspiration System/2L Vacuum Aspiration System

NOTE 

Always attach lid on tightly, ensuring that screw threads are properly aligned. The seal in the lid will only function correctly when adequately compressed.

Make sure discharge valve is closed by turning clockwise or vent cap is sealed on the 2L Vacuum Aspiration System.

- Turn the power switch on back of instrument base to “ON” (I).
- Turn the regulator knob clockwise; set the vacuum level.

The lights will become steady indicating that the system has reached the desired vacuum. Vacuum increases as the regulator knob is turned clockwise.

7. Shut down

- Turn the power switch on back of instrument base to “OFF” (O).
- Loosen the discharge valve by turning counterclockwise or unplug vent if using the 2L Vacuum Aspiration System.

8. Maintenance, Care and Safety Precautions

Maintenance

The 4L Vacuum Aspiration System / 2L Vacuum Aspiration System does not require any special servicing or maintenance. If a reduction in suction power occurs, it may be caused by blockages in the tube and/or filter on the pump side.

This may be remedied by exchanging the affected tube and/or filter.

- Press the button on the hand operator to start suction.
- Unplug all cable and tubes from cap and remove cap from the bottle.
- Discard any waste from the bottle.

Care

The 4L Vacuum Aspiration System / 2L Vacuum Aspiration System may be cleaned with most common laboratory disinfectants, including isopropanol.

NOTE 

When using level detection, always ensure that the contact pins on bottle lid are kept clean and dry.

DANGER 

Always unplug the 4L Vacuum Aspiration System / 2L Vacuum Aspiration System from power supply before cleaning. Never use caustic solutions (such as nitro thinners) to clean the unit.

9. Troubleshooting (FAQ)

Problem	Possible Cause	Remedy
Equipment not running; no vacuum	No power line voltage	Insert mains adapter plug into suitable power outlet
	No DC supply	Connect mains adapter to instrument
	Pump switched off	Turn power switch to “ON” (I). Ensure that LED indicator under bottle is lit
Suction power inadequate or pump runs constantly	Suction power selected too low	Turn control knob clockwise
	Leak in vacuum system	Check tubes and filters
		Check lid and tighten if necessary
		Check if sealing plug/venting screw on bottle lid is leaking
		Ensure that filter is fully tightened on to unit
	Ensure that leak flow of hand tool is not excessively high	
	Bottle full; liquid is sucked into filter	Remove wet filter and replace with new, dry filter
Empty excess liquid from existing bottle or replace with new, empty bottle		
Tubes Blocked	Clean or replace tubes	
Alarm level detection not working (4L Vacuum Aspiration System)	Sensor cable incorrectly connected	Check that cable is correctly connected to device and lid
	Liquid in bottle has reached the sensor	Empty excess liquid from bottle

10. Specifications

Voltage	100 – 240 VAC, 50/60 Hz
Vacuum range	0 to 600 mbar (adjustable)
Pumping speed	15 L/min (air)
Aspiration rate	17 ml/s (aspiration pipette)
Noise	< 55 dB(A) (1 Meter)
Size (H x W x D)	180x240x450mm (4L Vacuum Aspiration System) 180x240x340 mm (2L Vacuum Aspiration System)
Weight	3kg (4L Vacuum Aspiration System) 2.8kg (2L Vacuum Aspiration System)
Pollution Degree	2
Relative humidity	50%

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