

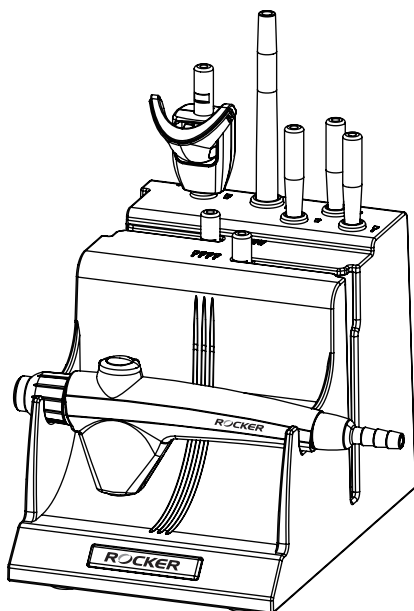
INSTRUCTION MANUAL

Suction Kit

Model No.

BioDolphin
Plus

Tech support



ROCKER

Please read this instruction manual before using this product.

Important Notice

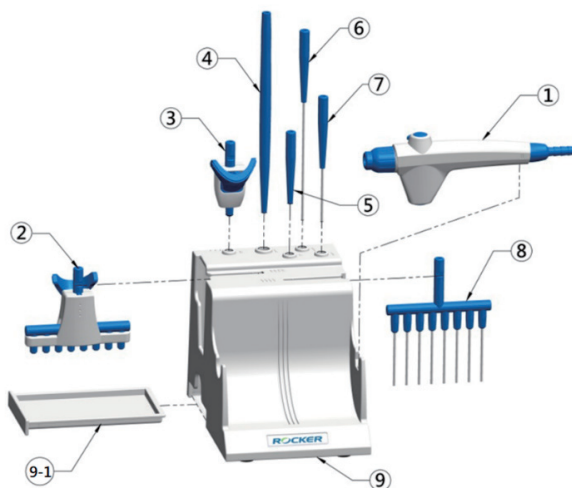
This instrument is designed for laboratory usage only. Please read this manual carefully before installing and operating. The instrument shall not be modified in any way. Any modification will void the warranty and may result in potential hazard. We are not responsible for any injury or damage caused by any non-intended purposes and modifying the instrument without authorization.

1. Never operate this product with any corrosive, high concentrated chemicals or liquid.
2. Suction kit and adaptors are made of POM and SS304, please check the chemical compatibility chart to make sure if it is resistance to sucked liquid.
3. Please clean and maintain the instrument according to instruction after every use.
4. Rack and liquid collection tray are not autoclavable.
5. Please use fluororubber material for o-ring replacement.
6. Please discard packing material according to local related regulations.
7. For more product details, please refer our latest catalog and website.

**Before operation, please check whether the compatibility of materials with used medium.*

Unpacking

Please check if the package is complete without any damage before unpacking. When unpacking, please make sure you have all accessories that indicated on the list. If there is any problem, please keep the serial number along with packing case and contact your local distributor immediately for assistance.



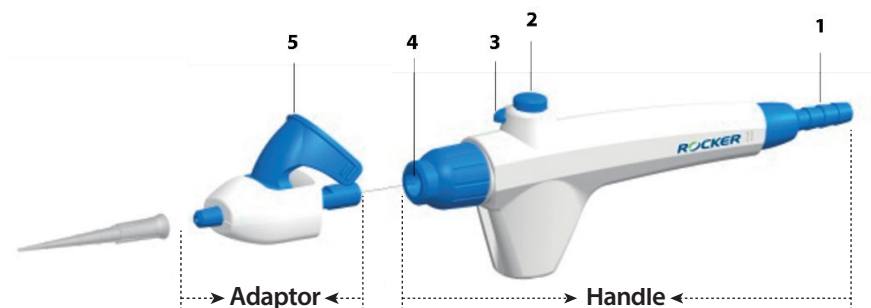
Plus / BioDolphin

Model		Standard Package Includes:	
BioDolphin	Plus	0	Instruction Manual
		1	Handle
		2	8-channel tip adaptor with ejector
		3	1-channel tip adaptor with ejector
		4	1-channel tip adaptor (150 mm)
		5	1-channel tip adaptor (50 mm)
		6	1-channel SS adaptor (80 mm)
		7	1-channel SS adaptor (40 mm)
		8	8-channel SS adaptor (40 mm)
		9	Rack
		9-1	Liquid collection tray

* Both side of 1-channel tip adaptor (4) is each compatible with 200 μ L and 1000 μ L tip.

** Except for rack (9) and liquid collection tray (9-1), the suction kit is available for autoclave.

Main Part Diagram

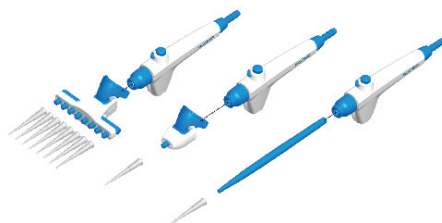


Position	Designation	Position	Designation
1	Outlet of Handle	4	Inlet of Handle
2	Suction Button	5	Ejector
3	Lock Switch		

Installation and Operation

Installation of Adaptor

- A. Choose an appropriate adaptor and plug it into inlet of handle (4).
 - Remove and change the adaptor by simply unplug it.
 - Before changing the adaptor, please ensure there's no liquid in the handle and tube to avoid risk of contamination.
- B. Connect the corresponding tip(s) according to selected adaptor.

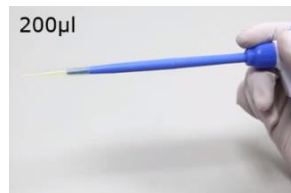


Operation

- A. Connect the outlet of handle (1) to vacuum bottle by silicone tube to collect suction liquid.
Connect other side of vacuum bottle to vacuum pump by silicone tube.
- B. Turn on the pump, dip the tip(s) into liquid and press the suction button (2) to start aspirating.
- Hold the suction button (2) and press the lock switch (3) to keep suction continuously.
- C. Changing adaptor or tip(s) if necessary.
- Before changing the adaptor and tip(s), please ensure there's no liquid in the handle and tube to avoid risk of contamination.
 - Ejector exists only on specific adaptors, please remove tip(s) by hands if there's no ejector.
- D. After aspiration, please aspirate pure water several times to clean the suction kit and tubing and let them dry naturally.
- Handle and adaptors (except rack) are autoclavable as needed.



Lock Switch Operation



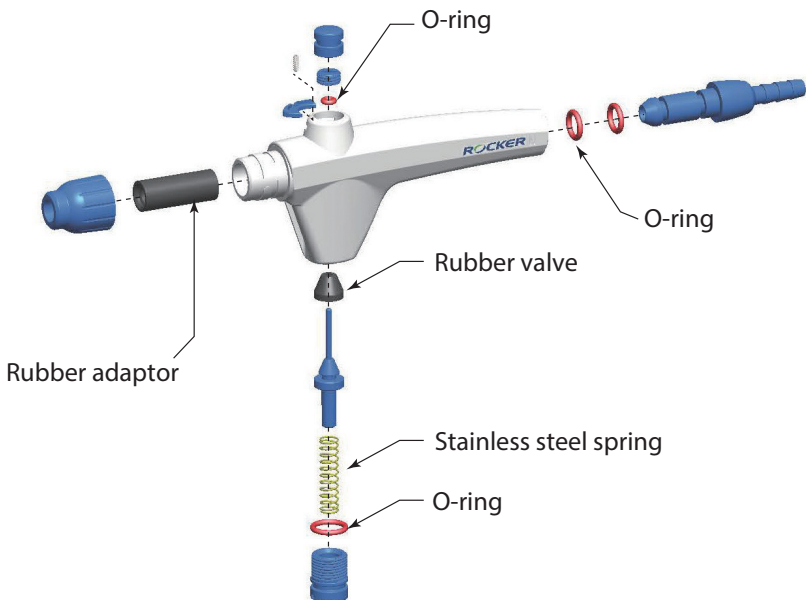
**Dual Function of
150 mm 1-channel tip adaptors**



Suction System Assembly Diagram

Maintenance

1. Please pump the pure water to clean the tubing after every use to prevent any dirty is left over. Keep pumping the air for more than 3 mins for eliminating the residual liquid in the tubing.
2. Please clean the handle and adaptors with pure water before autoclaving. Do not use bleach for cleaning.
3. Suction accessories (except for rack), vacuum bottle and silicone tube are autoclavable (121°C, 1 bar, 20 min). Please make sure to rinse with pure water and separate each part before autoclave.
4. Rack and liquid collection tray in suction kit are made of ABS which is not autoclavable, please clean it with pure water, 75% ethanol or isopropanol (IPA).
5. If the stainless steel adaptor is blocked, please soak it in the pure water for at least a half hour and eliminate the block by L type cleaning rod.
6. O-ring(s), silicone tube(s) and rubber pieces are consumables, it is recommended to replace it on a yearly basis or as needed to ensure good operation.



Troubleshooting

Problem	Reason and Solution
Failed suction button	<ul style="list-style-type: none"> SS spring is broken → Replace a new spring.. Handle is broken → Contact distributor for assistance.
Weak aspiration	<ul style="list-style-type: none"> Improper vacuum level → Adjust to proper vacuum level or change a proper vacuum source. Syringe filter before the pump inlet is blocked → Change a new syringe filter. Connection tubing are not sealed → Change new silicone tubes. Air leakage from handle → Change rubber parts, including rubber adaptor and O-rings. Broken handle or adaptors → Contact distributor for assistance.

Ordering Information

199100-00	BioDolphin Suction Kit (Light Blue)
199110-00	BioDolphin Suction Kit (Deep Blue)
199130-00	BioDolphin Suction Kit (Green)
199200-00	Plus Suction Kit (Light Blue)
199210-00	Plus Suction Kit (Deep Blue)
199230-00	Plus Suction Kit (Green)
199100-30	Handle of BioDolphin Suction Kit
199100-51	Repair kit (include L-type cleaning rod, SS spring, silicone sleeve)
199100-53	Seal pack of handle (include O-ring P7, AS004, AS012, sleeve and valve)
199100-68	Silicone tube, Φ 4.2 x 8 mm, 2 m
197000-60-500	500 mL Laboratory Glass Bottle with GL45 Suction Cap
197100-10	1000 mL PP Vacuum Bottle
197200-53	4000 mL PP Vacuum Bottle with Quick-coupling Connectors
197000-60	GL45 Suction Cap

Rocker Scientific Co., Ltd.

Tel: +886-2-26033311 Fax: +886-2-26036622

E-mail: export@rocker.com.tw <https://www.rocker.com.tw>