

# Operation Manual for the Drummond Pipet-Aid® XP

Catalog Number 4-000-101



Made in USA  
by



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# Operating Instructions for the Drummond Pipet-Aid® (Model XP)

Thank you for purchasing the Drummond Model XP Portable Pipet-Aid® which incorporates several important features:

- A powerful pump designed specifically for Pipet-Aid® use.
- Compact, lightweight design.
- Individual speed controls for both the aspirate and the dispense buttons.
- Designed and constructed with material that will withstand commonly used reagents.
- Nosepiece lock to prevent accidental removal.
- External battery access.

The Drummond Pipet-Aid® XP is covered under the following US Patents, and other foreign patents pending. #5,294,405, #5,214,968, #5,616,871

## Important Safeguards

When using electrical appliances, basic safety precautions should always be followed, PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE USING UNIT

- ! WARNING:** To reduce the risk of fire, electrical shock or injury to persons:
- Do not put unit or charger in water or other liquid.
  - Do not operate in the presence of explosives and/or flammable fumes or liquids.
  - Do not operate charger with damaged cord or if damaged in any way.
  - Use charger only in a standard electrical outlet.
  - Do not attempt to use the charger with any other product. **DO NOT ATTEMPT TO CHARGE THIS UNIT WITH ANY OTHER CHARGER.**
  - Do not handle plug of charger with wet hands.
  - This product includes rechargeable Ni-MH batteries. Do not incinerate batteries as they will explode at high temperatures.

## Instructions for Use

Insert a pipet into the nosepiece by twisting the pipet while pushing. Exercise extreme caution when using glass pipets as breakage is an ever-present danger. Depressing the top button fills the pipet, depressing the bottom empties it. The flow rate is proportional to the amount the button is depressed.

## Speed Controls

Each button has three speeds—“F” fast, “M” medium, “S” slow. The speed is selected by rotating the button on its axis until the speed chosen is visible when the handle is held in the right hand. The “M” corresponds to the speed of previous Pipet-Aids®. Fast is to be used for rapid filling of large pipets or breaking up cell clumps. Slow speed should be used for small pipets or where precise delivery is required. Please note that each button can be set independently so, for example, one could fill a large

pipet on “F” and deliver small amounts on “S”. **CAUTION:** SPEED Control Buttons must be positioned on “F”, “M”, or “S”. Intermediate settings will cause leakage. Also do not change Speed Control Buttons with fluid in the pipet. This will cause the unit to leak.

## Battery

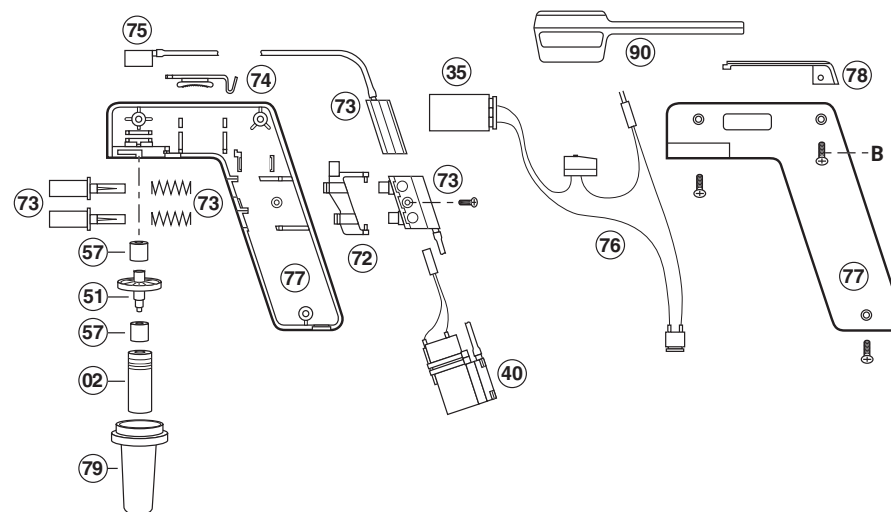
The XP is powered by a nickel-metal hydride rechargeable battery. To get the maximum life from the battery, recharge it overnight as needed. The battery can be replaced by removing the screw marked (B) on the diagram and sliding out the cover (78).

## Filter

The XP incorporates a TISSUE CULTURE NOSEPIECE, which features a unique filter element. The TC filter will cease to pass air in either direction when it becomes wet, alerting the user to possible contamination of the rubber insert. To remove the filter, slide the nosepiece release (74) away from the nosepiece and twist off the nosepiece.

## Parts

A parts list and assembly drawing is included for reference. Commonly used parts (e.g. rubber inserts, batteries) are available from your dealer or Drummond Scientific Company. We welcome your comments, questions or suggestions.



### Index Numbers Correspond to Last Digits in Catalog Number

Catalog No.	Parts Description	Catalog No.	Parts Description
4-000-002	Rubber Insert 2/pack	4-000-073	Valve Body Assembly
4-000-030*	Pipet-Aid® charger 110V	4-000-074	Nosepiece Release
4-000-031*	Pipet-Aid® charger 230V	4-000-075	Handle Connector
4-000-035	Ni-MH Rechargeable Battery	4-000-076	Wire Harness with Switch & Terminals
4-000-040	Portable Motor & Pump	4-000-077	Handle Shell
4-000-051	Replacement Filters 5/pack	4-000-078	Battery Door
4-000-052	Replacement Filters 50/pack	4-000-079	EZ Grip Nosepiece
4-000-057	TC Filter Gasket 2/pack	4-000-090	Removable Stand
4-000-072	Switch Operator		

\*Charger not shown