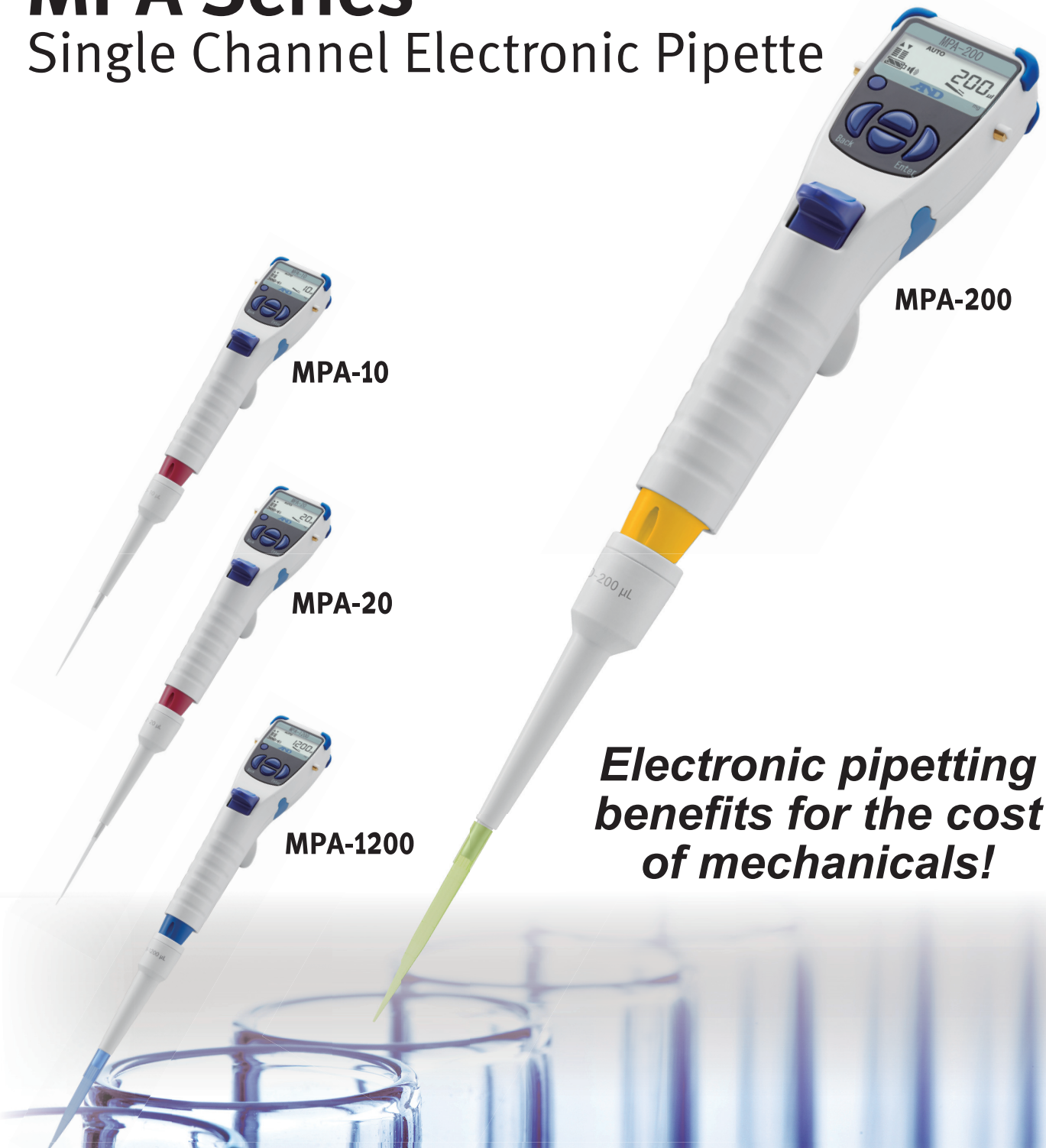
A&D WEIGHING

MPA Series

Single Channel Electronic Pipette



Electronic pipetting benefits for the cost of mechanicals!

A&D Weighing

...Clearly a Better Value

SINGLE CHANNEL ELECTRONIC PIPETTES

Still using outdated manual pipettes? A&D Weighing now offers a true alternative!

Consider the following advantages and you will realize why A&D's MPA Series should be your choice to replace mechanical pipettes.

Advantages of Using an Electronic Pipette

Superior reproducibility and high precision

Unlike the manual pipette, dispensed quantities will not vary with each user, which makes the results of analyses always reliable. If necessary, you can concentrate on other tasks while leaving pipetting work to others.

Reduced physical strain with light and short key strokes

Eliminate repetitive strain injury (RSI) on the thumb after long hours of work with a manual pipette. The key operation of an MPA electronic pipette requires a minimum amount of force by using the ball of the index finger, keeping strain on the hand to the lowest degree possible.

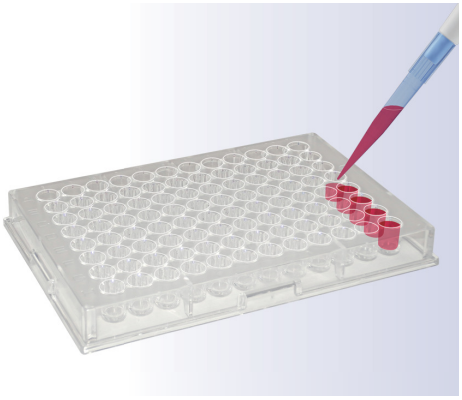
Increased efficiency with automated pipetting modes

Apart from normal automatic aspirating and dispensing (AUTO mode), the following functions help greatly reduce time, stress and error associated with certain pipetting tasks:

Multiple Dispensing (MD) Mode

The MD mode lets you dispense one aspirated volume (e.g. 1200 µL) by multiple installments of a smaller volume (e.g. 100 µL × 12 times), which greatly helps when you need to repeatedly deliver the same amount of sample into a microplate, etc.

The MPA automatically corrects error in the first installment that is inherent in electronic pipettes*, thus enabling highly precise multiple dispensing.



*Patent pending

Mixing (MIX) Mode

In MIX mode the pipette executes a set number of aspirating-dispensing cycles to mix and homogenize the solution in the receiving vessel. With a manual pipette the same task is tiresome and difficult to perform correctly when the mixing volume is small.

Reverse operation

If reverse operation is selected, the pipette first aspirates a volume larger than the set dispensing volume, and discards the excess volume after delivery. This function is recommended for a viscous sample liquid that tends to linger in the tip.

Unique Features of the MPA Series

Easy calibration (adjustment) by yourself – User CAL function*

Frequent, outsourced pipette calibration services can be expensive and impractical. With the MPA, you can ensure pipette accuracy by performing calibration at your own facility when needed, increasing the precision of your analyses.

*Patent pending

This function also corrects error due to differences in tip characteristics, therefore assuring accurate pipetting with tips manufactured by other companies.

Weight calibration using a balance

Calibration and display in a unit of weight (mg)*

The MPA Series enables you to calibrate and display the pipetting amount based on weight (mg) as well as volume (µL).

This makes it easier for you to 1) handle liquids that need to be managed by weight, such as a diluted solution of a solid or powder; and 2) control more precisely the dispensing amounts of high-viscosity liquids, which are prone to error with normal volume calibration.

*Patent pending

Increased resistance to impacts from falls

One of the most common repairs of electronic pipettes is for a broken LCD display due to drops and falls. With padding on the four corners of the head*, the LCD panel of the MPA is designed to be protected from impacts from falls.

*Patent pending

Impact-absorbing pads

User-friendly industrial design

The movement of the trigger can be controlled with the ball of the index finger instead of the thumb, while maintaining all fingers in a natural, effortless grip.

MPA SERIES SPECIFICATIONS

Model		MPA-10		MPA-20		MPA-200		MPA-1200	
Capacity range		0.5 to 10.0 µL		2.0 to 20.0 µL		10 to 200 µL		100 to 1200 µL	
Performance*1*2	Volume	1.0 µL	10.0 µL	2.0 µL	20.0 µL	10 µL	200 µL	100 µL	1200 µL
	Accuracy	±4.0%	±1.0%	±4.0%	±1.0%	±2.5%	±0.6%	±2.5%	±0.5%
	Repeatability (CV)	2.5%	0.4%	2.5%	0.4%	1.0%	0.15%	0.6%	0.15%
Operation mode		Standard mode (AUTO), Multiple dispensing mode (MD), Mixing mode (MIX), System setting mode (SYS)							
Program memory		9 programs							
Aspirating/dispensing speed		5 speeds							
Pipette drive method		High precision stepping motor							
Power saving function		Automatic power off after 10 minutes of inactivity							
Maximum number of pipetting cycles		1,800 (on a full charge) *1							
Charging time		Approx. 5 hours / 100%							
AC adapter		Input: AC 100 to 240V, Output: DC 5V / 1A, Plug shape: selectable							
Autoclave treatment		Possible for the lower part of the pipette (121°C, 2 atm, 20 minutes)							
Operating environment		59 to 86°F (15 to 30°C), 85%RH or less							
Battery		Lithium-ion battery 3.7V / 920 mAh							
Length		Approx. 11 inches / 250 mm							
Weight (including the battery)		Approx. 150 g				Approx. 160 g		Approx. 170 g	

*1 In standard mode with maximum aspirating and dispensing speeds
*2 For the MPA-10, specifications apply for volumes of 1.0 µL or above

Specifications subject to change without notice.

Tips / Consumables

- **AX-CART-10/20** 10 tip sets for MPA-10 and MPA-20 (960 tips total)
- **AX-CART-200** 10 tip sets for MPA-200 (960 tips total)
- **AX-CART-1200** 10 tip sets for MPA-1200 (960 tips total)

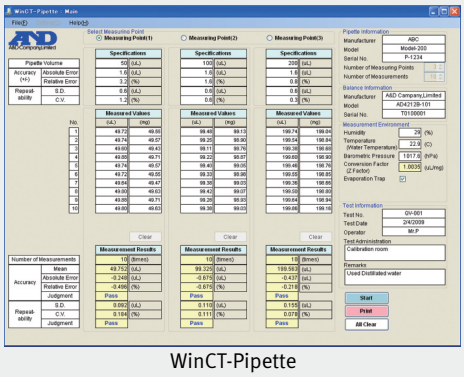
3 YEAR A&D Weighing WARRANTY

Pipette Test and Calibration

The AD-1690 Leak Tester checks for leaks in 20-seconds so you can confirm correct operation daily. Three pipette calibration products test and verify volumes to the ISO-8655 standard.

AD-1690 Leak Tester

AD-4212B-PT Pipette Accuracy Tester



WinCT-Pipette

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