

electronic

micropipettes



Latest upgrade of a successful line making electronic pipetting more versatile, simpler and safer than ever.

The Acura® electro features:

- Optimal ergonomics, light weight
- Easy, intuitive, self-teaching programme
- Large display, reversible right / left reading
- Swift-interchange battery pack
- Fast charge, long working autonomy
- Adjustable tip ejector* fitting most tips
- Pipetting cycle counter
- Interchangeable volumetric modules
- * Socorex patented



The Acura® electro models

micro



Acura® electro

vour electronic choice





► Natural ergonomics

The Acura® electro offers shape, balance and working ergonomics resembling those of a manual instrument. But comfort is so greatly improved that pipetting and result consistency are just outstanding.





Unique "right or left" display reading

Display converts instantly to right or left side reading. All information clearly presented and visible at a glance during programming, pipetting and calibration steps.



► Variable working speed

Located on the front side, speed selector allows swift change even during the pipetting process. In addition, slow speed access at any time by gentle touch of start button.



► Long working autonomy

NiMH battery pack exchangeable right-away. Fast battery charging (< 1.5 hours) and extended working autonomy (> 3000 consecutive pipetting cycles). Battery charge level clearly visible on display. Automatic energy saving stand-by when unused.

Microprocessor-controlled instrument line featuring intuitive software avoiding any complicated programming steps. No particular skills are required to get quick access to six working modes and many volumes to select from. Unsurpassed metrological performance and stability.

Micropipettes

- Reduced shaft length and conical end improve driveability and access to microtubes and microplates
- Optional longer volumetric modules
- Simple conversion by user at any time

Macropipettes

- Interchangeable nozzle protection filter
- Adapters for Pasteur pipette and straw tips
- Outstanding accuracy and precision







Pipette charging stand

Stand allows charging and storing up to three electronic pipettes or battery packs simultaneously. Each position is fitted with a red/green charging LED. One stand supplied with every initial package.



Battery charging rack

Space saving stand holds up to three battery packs simultaneously. The ideal charging and storage accessory for spare batteries, available at any time.



Multichannel pipettes

- Large selection of 8- and 12-channel models
- Light weight and perfect hand fitting
- Sequential tip ejection
- Also fit any single channel volumetric module



Performance

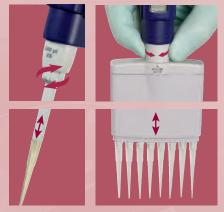
		Inaccuracy (E%)		Imprecision (CV%)					
Volume	Division	Min. vol.	Mid. vol.	Max. vol.	Min. vol.	Mid. vol.	Max. vol.	Tip style	
Micropipet	Micropipettes Acura® <i>electro</i> 926XS								
0.1 - 2 µL	0.01 µL	$< \pm 2.5 \%^{1)}$	< ± 1.2 %	< ± 0.9 %	< 2.5 %1)	< 1.5 %	< 0.8 %	Ultra 10 µL	
0.5 - 10 μL	0.05 µL	$< \pm 1.2 \%^{2)}$	$<\pm$ 0.8 $\%$	$< \pm 0.6 \%$	< 1.5 %2)	< 0.7 %	< 0.35 %	Ultra 10 µL	
0.5 - 10 μL	0.05 µL	$< \pm 1.2 \%^{2)}$	$<\pm$ 0.8 $\%$	$< \pm 0.6 \%$	< 1.7 %2)	< 0.8 %	< 0.4 %	200 µL	
1 - 20 µL	0.1 µL	$< \pm 1.2 \%^{2)}$	$<\pm$ 0.6 $\%$	< ± 0.5 %	< 1.2 %2)	< 0.4 %	< 0.3 %	200 µL	
2.5 - 50 μL	0.25 µL	$< \pm 1.0 \%^{2)}$	$<\pm$ 0.6 %	< ± 0.5 %	< 0.7 %2)	< 0.3 %	< 0.25 %	200 µL	
5 - 100 µL	0.5 µL	$< \pm 1.0 \%^{2)}$	$<\pm$ 0.6 %	< ± 0.5 %	< 0.7 %2)	< 0.3 %	< 0.2 %	200 µL	
10 - 200 μL	1.0 µL	$< \pm 1.0 \%^{2)}$	$<\pm$ 0.6 %	< ± 0.4 %	< 0.6 %2)	< 0.2 %	< 0.15 %	200 µL	
50 - 1000 μL	5.0 µL	$< \pm 0.8 \%^{2)}$	$<\pm$ 0.5 %	< ± 0.4 %	< 0.4 %2)	< 0.15 %	< 0.1 %	1000 µL	
Macropipet	tes Acura®	electro 930	5						
0.1 - 2 mL	0.01 mL	$< \pm 1.5 \%^{2)}$	< ± 1.0 %	< ± 0.5 %	< 0.6 %2)	< 0.3 %	< 0.15 %	2 mL	
0.25 - 5 mL	0.05 mL	$< \pm 1.2 \%^{2)}$	$<\pm$ 0.8 %	< ± 0.5 %	< 0.6 %2)	< 0.3 %	< 0.15 %	5 mL	
0.5 - 10 mL	0.05 mL	$< \pm 1.0 \%^{2)}$	$<\pm$ 0.7 $\%$	< ± 0.5 %	< 0.5 %2)	< 0.2 %	< 0.15 %	10 mL	
Multichann	Multichannel pipettes Acura® electro 956								
0.5 - 10 μL	0.05 µL	< ± 3.5 % ²⁾	< ± 1.5 %	< ± 1.0 %	< 3.0 %2)	< 0.9 %	< 0.7 %	Ultra 10 µL	
2.5 - 50 µL	0.25µL	$< \pm 1.0 \%^{2)}$	$< \pm 0.9 \%$	$< \pm 0.8 \%$	< 1.0 %2)	< 0.6 %	< 0.4 %	200 µL	
10 - 200 μL	1.0 µL	$< \pm 0.9 \%^{2)}$	< ± 0.7 %	$< \pm 0.6 \%$	< 0.6 %2)	< 0.4 %	< 0.25 %	200 µL	
20 - 350 μL	5.0 µL	$< \pm 1.0 \%^{3)}$	$<\pm$ 0.8 $\%$	$<\pm$ 0.6 $\%$	< 0.6 %3)	< 0.4 %	< 0.25 %	350 µL	

Performance values obtained in Forward mode with bi-dist. water at constant temperature (\pm 0.5°C) comprised between 20 and 25°C in accordance with ISO 8655. Performance measured at: 19 0.5 μ L, 29 10% of nominal volume, 39 40 μ L.



► Tip ejection - easier than ever

Maximal efficiency obtained with a large surface, ergonomically located ejector button. The patented shaft height adjustment system called Justip TM (4 mm span) - controlled by efficient click-stops - allows a wide selection of tips to tightly fit the nozzle.



The multichannel bowed shape ejector head permits effortless, sequential tip ejection.



► Optimal working position

360° rotation of multichannel volumetric modules allows selection of the best working position.



► Pipetting cycle counter

A simple double click gives access to the number of pipetting cycles performed since last zeroing.

Qualitips® your premium pipette tips

Qualitips® pipette tips

These superior pipette tips cover a range between 0.1 μ L and 10 mL. All models autoclavable. Optimal tightness fitting on Socorex pipettes and broad compatibility with other brands.

Description	Volume	Racks	Cat. No.	Bags	Cat. No.	Length	
Natural ultra-microtip	10 μL	10 x 96/rack	309.0010R	1 x 1000/bag	309.0010B	31.0 mm	
Natural gel loading tip	10 μL	4 x 204/rack	302.0010GR			70.9 mm	
Natural microtip	10 μL	10 x 96/rack	302.0020R	1 x 1000/bag	302.0020B	42.3 mm	
Natural universal tip	200 μL			2 x 500/bag	307.0200B	49.4 mm	
Yellow universal tip	200 μL	10 x 96/rack	327.0200R	2 x 500/bag	327.0200B		
Natural tip	200 μL	10 x 96/rack	308.0200R	1 x 1000/bag	308.0200B	51.1 mm	
Natural gel loading tip	200 μL	4 x 204/rack	308.0200GR			69.0 mm	
Natural tip	200 μL	10 x 96/rack	309.0200R	2 x 500/bag	309.0200B	49.7 mm	
Yellow tip	200 μL	10 x 96/rack	329.0200R	2 x 500/bag	329.0200B		
Natural tip	350 µL	10 x 96/rack	308.0350R	1 x 1000/bag	308.0350B	58.8 mm	
Natural universal tip	1000 μL	10 x 60/rack	307.1000R	4 x 250/bag	307.1000B	79.0 mm	
Blue tip	1000 μL	10 x 60/rack	318.1000R	4 x 250/bag	318.1000B	69.5 mm	
Natural tip	1000 μL	10 x 60/rack	309.1000R	4 x 250/bag	309.1000B	72.0 mm	
Blue tip	1000 µl	10 x 60/rack	319.1000R	4 x 250/bag	319.1000B		
Natural macrotip	2 mL			2 x 250/bag	312.02	115.5 mm	O THE O
Natural macrotip	5 mL	2 x 50/rack	312.05R	2 x 250/bag	312.05B	123.2 mm	
Natural macrotip	10 mL	4 x rack alone	312.10ER	3 x 100/bag	312.10	150.0 mm	

Qualitips® with filter

Efficient protection against aerosols. Include high-density PE filter for complete, uncontaminated sample retrieval. Certified DNAse and RNAse free. Sterilized tips are guaranteed pyrogen free.

				_			
Description	Volume	Racks	Cat. No.	Bags	Cat. No.	Length	
Sterilized ultra-microtip	ο 10 μL	10 x 96/rack	309.0010FR			31.0 mm	
Sterilized microtip	10 µL	10 x 100/rack	302.0010FR			45.6 mm	
Autoclavable microtip	10 μL			1 x 1000/bag	302.0010AFB		
Sterilized tip	20 μL	10 x 96/rack	308.0020FR	5 x 100/bag	308.0020FS	51.0 mm	
Sterilized gel loading t	ip 20 μL	10 x 96/rack	308.0020GFR			69.0 mm	
Sterilized tip	100 µL	4 x 204/rack	308.0100FR			54.1 mm	
Sterilized gel loading t	ip 100 μL	10 x 96/rack	308.0100GFR			69.0 mm	
Sterilized extended tip	200 µL	4 x 204/rack	308.0200LFR	5 x 100/bag	308.0200LFS	90.9 mm	
Sterilized tip	300 µL	4 x 204/rack	308.0300FR			58.8 mm	
Autoclavable tip	300 µL			1 x 1000/bag	308.0300AFB		
Sterilized tip	1000 µL	10 x 96/rack	309.1000FR	5 x 100/bag	309.1000FS	88.6 mm	
Autoclavable tip	1000 μL			1 x 1000/bag	309.1000AFB		

 $B=bag,\,F=filter,\,G=gel\;loading,\,L=long,\,R=rack,\,S=single\;wrapped,\,A=autoclavable$

All-purpose reservoirs

Well adapted for multichannel pipettes, the reagent reservoirs come in various shapes and configurations at economical costs.

Material	Volume	Style	Lid	Sterilized	Packaging	Cat. No.
PP	75 mL	V-shaped	No	No	20/pack	330.01
PP	125 mL	V-shaped	Hinged lid	No	20/pack	330.01L
PS	48 mL	8-channel	No	No	30/pack	330.08
PS	48 mL	8-channel	No	No	100/pack	330.08XL
PS	48 mL	12-channel	No	No	30/pack	330.12
PS	48 mL	12-channel	No	No	100/pack	330.12XL
PS	48 mL	8-channel	No	Yes	10x 1/pack	330.08.9
PS	48 mL	12-channel	No	Yes	10x 1/pack	330.12.9

Nozzle protection filter

Description	Pack	Cat. No.
For 2 and 5 mL models	250 / pk	322.05
For 10 mL model	100 / pk	322.10

Pasteur pipette adapters

Description	Pack	Cat. No.
For 2 mL model	1 / pk	1.835.631
For 5 mL model	1 / pk	1.835.633



Great built-in working flexibility

Surf through mode selection by pressing a single button.



Forward mode

Aspiration and pipetting of set volume. Suitable for all applications.



Reverse mode

Aspiration in excess, followed by dosing of set volume. Enhances reproducibility below 20 μ L. Especially recommended for viscous and foaming liquids.



Stepper mode

Tip filling and step-by-step distribution. Best suited to aliquot samples.



• Dilution mode

Aspiration of 2 or 3 different volumes for restitution in one shot. An easy way to dilute samples.



• Tactile mode

"Start and stop" liquid measurement, titration and gel loading by simple touch of activation button.



Mixino

"Up and down" liquid flow in the tip / vial.

Interchangeable volumetric modules

One control unit fits a choice of 27 volumetric assemblies available separately. This greatly extends working possibilities and makes electronic pipetting affordable to all budgets. Disassembling and re-assembling without any tool contributes towards maximal flexibility.



Calibration specificities of extra modules - as set by factory QC or by pipette owner - are retained in instrument memory.



► Initial package

Recommended on first purchase of an Acura® electro. Each initial package contains one electronic pipette, QC certificate and operating instructions, charging stand, power supply, additional battery pack, Qualitips® pipette tips samples. Thereafter, additional pipettes can be purchased alone and charged on existing stand.



► Time efficient maintenance

Pipette construction limits maintenance to a minimum - no tool required to remove volumetric module. The pipetting cycle counter facilitates maintenance monitoring. Whenever sterilisation is needed, volumetric modules can be removed and autoclaved at 121°C / 250°F.



► Calibration

Control software gives immediate access to calibration menu. Performance check possible over two or three independent volumes (Vmin, Vmid and Vmax). New settings entered directly from the keyboard. Error message warns of any inaccurate plunger movement.



► Key beep

Sound can be turned on/off anytime.

electronic micropipettes

Ordering information - Instrument

Initial package includes pipette, charging stand and accessories. Additional pipettes (alone) supplied with individual QC certificate, Qualitips® pipette tip samples and operating instructions.

Volume	Division	Tip style	Cat. No. Initial package*	Cat. No. Pipette alone
Acura® electro 926X9	micropipettes			
0.1 - 2 µL	0.01 µL	Ultra 10 µL	926.0002E	926.0002
0.5 - 10 µL	0.05 µL	Ultra 10 µL	926.0010E	926.0010
0.5 - 10 µL	0.05 µL	200 µL	926.0010YE	926.0010Y
1 - 20 µL	0.1 µL	200 µL	926.0020E	926.0020
2.5 - 50 µL	0.25 pL	200 µL	926.0050E	926.0050
5 - 100 µL	0.5 µL	200 µL	926.0100E	926.0100
10 - 200 µL	1.0 µL	200 µL	926.0200E	926.0200
50 - 1000 μL	5.0 µL	1000 µL	926.1000E	926.1000
Acura® electro 936 m	nacropipettes			
0.1 - 2 mL	0.01 mL	2 mL	936.02E	936.02
0.25 - 5 mL	0.05 mL	5 mL	936.05E	936.05
0.5 - 10 mL	0.05 mL	10 mL	936.10E	936.10
Acura® electro 956 8	-channel pipettes			
0.5 - 10 µL	0.05 µL	Ultra 10 µL	956.08.010E	956.08.010
2.5 - 50 µL	0.25µL	200 µL	956.08.050E	956.08.050
10 - 200 µL	1.0 µL	200 µL	956.08.200E	956.08.200
20 - 350 µL	5.0 µL	350 µL	956.08.350E	956.08.350
Acura® electro 956 1	2-channel pipettes			
0.5 - 10 µL	0.05 µL	Ultra 10 µL	956.12.010E	956.12.010
2.5 - 50 µL	0.25 µL	200 µL	956.12.050E	956.12.050
10 - 200 µL	1.0 µL	200 µL	956.12.200E	956.12.200
20 - 350 µL	5.0 µL	350 µL	956.12.350E	956.12.350

*Replace E by country codes if plug other than Europe type needed: G = UK, U = USA-Japan, A = Australia-NZ

Ordering information - volumetric modules and accessories

Volume range	Cat. No.					
Single channel microvolumes						
Reduced shaft length						
0.1 - 2 µL	800.0002XS					
0.5 - 10 µL	800.0010XS					
0.5 - 10 µL*	800.0010YXS					
1 - 20 µL	800.0020XS					
2.5 - 50 µL	800.0050XS					
5 - 100 µL	800.0100XS					
10 - 200 µL	800.0200XS					
50 - 1000 μL 800.1000XS						
For 200 µL tip styl	°For 200 µL tip style					

Charging units, 3 positions Stand for pipettes or battery packs Stand for power

Spare battery, blue colour

Description

handles only

NiMH, 4.8V

NiMH, 4.8V

Volume range	Cat. No.					
Single channel microvolumes Regular shaft length						
0.1 - 2 µL 800.0002						
0.5 - 10 µL	800.0002					
0.5 - 10 µL*	800.0010Y					
1 - 20 µL	800.0020					
2.5 - 50 µL	800.0050					
5 - 100 µL	800.0100					
10 - 200 μL	800.0200					
50 - 1000 μL	800.1000					

	5 - 100 μL 10 - 200 μL 50 - 1000 μL	
ng	Cat. No.	
	320.903.48	1
	320.913.48	í
		- 1

900.920.48

900.922.48

Volume range	Cat. No.
Single channel	macrovolumes
0.1 - 2 mL	800.2000
0.25 - 5 mL	800.5000
0.5 - 10 mL	800.10000
8-channel micr	ovolumes
0.5 - 10 µL	800.08.010
2.5 - 50 µL	800.08.050
10 - 200 µL	800.08.200
20 - 350 µL	800.08.350
12-channel mid	rovolumes
0.5 - 10 µL	800.12.010
2.5 - 50 µL	800.12.050
10 - 200 µL	800.12.200
20 - 350 μL	800.12.350

Description	Packaging	Cat. No.
Power supply, 100-240	V	
Europe style plug	1 / pk	900.901.48E
UK style plug	1 / pk	900.901.48G
USA-Japan style plug	1 / pk	900.901.48U
Australia - NZ style plug	1 / pk	900.901.48A

Your local distributor

Packagi

1 / pk

1 / pk

Standards and compliance

The Acura® electro pipettes are designed to operate under national and international standards such as EN ISO 8655, GMP, GLP, NCCLS. They conform to:

- ED 89/336 EEC, 91/263 EEC, 92/31 EEC, 93/68 EEC, FCC-CFR47, part 15 (electromagnetic compatibility)
- ED 73/23 EEC, 93/68EEC, IEC 61010-1 (electrical safety)
- ED 2011/65/EC Restriction of Hazardous Substances (RoHS)





QC, safety and warranty

Each instrument bears its own serial number and passes strict performance control attested by an individual QC certificate. Refer to package inserts for safety precautions, operating instructions and warranty terms.

Products and specifications are subject to change without prior notice.

US Patent 6,833,114 B1, EP Patent 1 185 368 B1, U.S. Patent 8,900,526 B2 www.socorex.com/patents-en.html









SOCOREX ISBA S.A. Champ-Colomb 7, P.O. Box 378 1024 Ecublens / Lausanne Switzerland socorex@socorex.com www.socorex.com Tel +41 (0)21 651 6000 Fax +41 (0)21 651 6001