





"I was suffering with RSI* in my right hand and arm as a result of years of pipetting using standard pipettes. Faced with taking a break from lab work or not using pipettes, I ordered the Novus series. These pipettes have allowed me to carry on without putting any strain on my arm and hand. My co-workers agree since they will often 'borrow' my pipettes."

– Dr. Farhat Khanim, University of Birmingh<u>am, UK</u>

Say Hello to Performance

For the pipettes you'll turn to again and again, choose Thermo Scientific Finnpipette Novus single and multichannel electronic pipettes. Finnpipette® Novus delivers performance — with greater ease-of-use and less risk of injury. Unique to Novus, the adjustable index-finger trigger action prevents common repetitive stress injuries caused by thumb-driven pipettes, and the easy-to-follow prompts guide Novus users through 10 pipetting functions. For a full range of applications, Novus will be your new favorite pipette.

Your Thumb Will Thank You

Most pipettes operate by thumb action, and plenty of users suffer repetitive stress injuries (RSI) from this design. Novus reduces the risk of RSI by putting the index finger to work and reducing the forces required to operate the pipette. The 120° adjustable index-finger trigger allows for ambidextrous use and overall better comfort for individual users.

Easy to Learn, Program, and Use

The intuitive menu and simple button layout make Novus so easy to use, you'll be pipetting in just minutes. Get one-press access to basic pipetting functions such as forward, reverse, diluting and stepping. Advanced functions, like programming, calibration and in-lab service, are easily found on the second-level menu. All functions are fully spelled out on the large, backlit LCD screen so no abbreviations need to be learned.

10 + 9 = Flexible

With 10 pipetting functions and 9 speeds, Novus offers the ultimate in flexibility and variety that can't be found in manual pipettes. The Mix and Dilute function demonstrated in the application note, *Use of Thermo Scientific Finnpipette Novus Electronic Pipettes for Accurate and Efficient Preparation of Standard Curves*¹, is excellent for accurate and efficient preparation of standard curves, with a time saving of up to 30% compared to manual pipettes. Personalize up to 9 programs for your most common protocols, saving time and ensuring accurate and precise pipetting.

There's a Novus for You

Novus covers the wide volume range of 0.5-10,000 μ l, and each pipette is color-coded by volume for easy recognition. Choose from nine single- channel models, or eight multi-channel versions, including a 16-channel for 384-well microplate applications. Novus is the only electronic pipette with a graphical user interface in seven languages.

1 www.thermoscientific.com/pipettinglibrary

Intuitive menu provides easy access to functions



The large screen displays a range of information



Work in your native language; choose from seven



Why electronic?

Novus blends the control and light weight of manual pipettes with the precision and accuracy afforded by electronic pipettes. Novus performance makes them ideal for applications with viscous liquids, small volumes or mixing. The motorized actions reduce the personal hand effect of manual pipettes and reduce risk of injury from repetitive pipetting or filling multi-well plates. For GLP research, Novus ensures data integrity by storing programs and monitoring the number of pipetting steps between calibration intervals.

Novus pipetting functions

Basic Functions

Pipette (forward technique)

Rpipet (reverse & repetitive technique)

Stepper

Dilute

Advanced Functions

Mix + Pipette
Pipette + Count
Seq Stepper

Mix + Dilute

Manual

Seq + Aspirate

The forward technique is recommended for aquaeous solutions, such as buffers, diluted acids or alkalis.

The reverse technique is suitable for dispensing liquids that have a high viscosity or a tendency to foam easily. The technique is also recommended for dispensing very small volumes.

The repetitive technique offers a rapid and simple procedure for repeated delivery of the same volume

With STEPPER function repeated dispensing of one selected volume is possible. Excellent particularly for microplate applications.

With DILUTE function dispensing of two selected volumes with an air gap between is possible

Mix and Pipette function adds automatic mixing after normal pipetting

Pipette + Count function adds automatic count number to pipetting

The sequential stepper function enables serial dispensing of different volumes. Excellent for applications with several different

volume steps.

With DILUTE+MIX function dispensing of two selected volumes with an air gap between followed by a Mix step is possible.

Excellent for preparation of standard curves.

With manual function it is possible to measure volumes. In manual mode only slower speeds are available to ensure a quick stop.

The sequential aspirate function enables serial aspirating of different volumes.

Make Novus your new favorite pipette.

Learn about good laboratory pipetting practices and techniques at www.thermoscientific.com/glp



Thermo Scientific Finnpipette Novus Single Channel Specifications**

	Range	Range			Inaccuracy		I mprecision		Color	
Order No.	(calibration)	(functional***)	Increment	Volume µl	μl	%	s.d.*µl	CV%*	code	Finntip
46200000	1-10 µ l	0.5 - 10 μ l	0.01 µl	10	±0.10	±1.0	0.05	0.5	pink	Flex 10, 10, 20 micro, 50 micro
				1	±0.035	±3.5	0.03	3.0		
46200100	1 - 10 µ l	0.5 - 10 μ l	0.01 µl	10	±0.10	±1.0	0.05	0.5	yellow	Flex 200, 250 Univ., 200 Ext.
				1	±0.070	±7.0	0.06	6.0		
46200200	5-50 µl	2.5-50 μ l	0.1 μ l	50	±0.40	±0.8	0.15	0.3	turquoise	50
				5	±0.15	±3.0	0.125	2.5		
46200300	5 - 50 μ l	2.5-50 μ l	0.1 μ l	50	±0.40	±0.8	0.15	0.3	ye ll ow	Flex 200, 250 Univ., 200 Ext.
				5	±0.15	±3.0	0.125	2.5		
46200400	10-100 μ l	5-100 µ l	0.1 μ l	100	±0.80	±0.8	0.20	0.2	ye ll ow	Flex 200, 250 Univ., 200 Ext.
				10	±0.30	±3.0	0.10	1.0		
46200500	30-300 µ l	15-300 μ l	1 µl	300	±1.8	±0.6	0.6	0.2	orange	Flex 300, 300,
				30	±0.90	±3.0	0.21	0.7		
46200600	100-1000 µl	50 - 1000 μ Ι	1 µl	1000	±6.0	±0.6	2.0	0.2	blue	Flex 1000, 1000, 1000 Ext.
				100	±3.0	±3.0	0.6	0.6		
46200700	0.5-5 ml	0.25-5 ml	0.01 ml	5000	±30.0	±0.6	10.0	0.2	green	5 ml
				500	±15.0	±3.0	4.0	8.0		
46200800	1-10 m l	0.5-10 m l	0.01 ml	10000	±60.0	±0.6	20.0	0.2	red	10 ml, Flex 10 ml Ext.
				1000	+30.0	+3.0	8.0	0.8		

Thermo Scientific Finnpipette Novus Multichannel Specifications**

	_	_				Inaccuracy		Imprecision			
Order No.	Range (calibration)	Range (functional ***)	Channels	Increment	Volume µl	μ l	%	s.d.*µl	CV%*	Color code	Finntip
46300000	1-10 μ l	0.5 - 10 μ l	8	0.1 μ l	10	±0.24	±2.4	0.16	1.6	pink	Flex 10, 10, 20 micro, 50 micro
					1	±0.12	±12.0	0.08	8.0		
46300200	5-50 µl	2.5-50 μ l	8	0.1 µl	50	±0.75	±1.5	0.35	0.7	yellow	Flex 200, 200 Ext, 250
					5	±0.25	±5.0	0.10	2.0		
46300400	30-300 μ l	15 - 300 μ l	8	1 μΙ	300	±3.0	±1.0	0.9	0.3	orange	300, Flex 300
					30	±1.5	±5.0	0.6	2.0		
46300800	100 - 1200 μ Ι	50 - 1200 μ Ι	8	1 μ	1200	±12.00	±1.0	2.40	0.2	turquoise	Flex 1200
					100	±3.00	±3.0	0.90	0.9		
46300100	1-10 µ l	0.5-10 μ l	12	0.1 µl	10	±0.24	±2.4	0.16	1.6	pink	Flex 10, 10, 20 micro, 50 micro
					1	±0.12	±12.0	0.08	8.0		
46300300	5-50 µl	2.5-50 μl	12	0.1 µl	50	±0.75	±1.5	0.35	0.7	yellow	Flex 200, 200 Ext, 250
					5	±0.25	±5.0	0.10	2.0		
46300500	30 - 300 μ l	15 - 300 μ l	12	1 µl	300	±3.0	±1.0	0.9	0.3	orange	300, Flex 300
					30	±1.5	±5.0	0.6	2.0		
46300700	5-50 µ l	2.5-50 µl	16	0.5 µl	50	±0.75	±1.5	0.35	0.7	turquoise	50
					5	±0.25	±5.0	0.10	2.0		

^{*} s.d. = Standard Deviation, CV = Coefficient of Variation. **Factory calibration limits achieved under strictly controlled conditions (ISO 8655).

Novus GLP Kits*

Order No. Description Order, No. Description Novus GLP Kit 3 4700470 Novus GLP Kit 1 Novus 1-10 µl, micro, single channel Novus 10-100 µl, single channel Novus 10-100 µl, single channel Novus 100-1000 µl, single channel Novus 100-1000 µl, single channel Two Finnpipette Novus stands Three Finnpipette Novus pipette stands Finntip Flex 200, rack; Flex 1000, rack Flex 10, rack; Flex 200, rack; Flex 1000, rack 4701130 Novus GLP Kit 4 4700490 Novus GLP Kit 2 Novus 10-100 µl, single channel Novus 100-1000 μ I, single channel Novus 100-1000 µl, single channel Novus 0.5-5 ml, single channel Novus 1-10 ml, single channel Two Finnpipette Novus stands Three Finnpipette Novus pipette stands Flex 1000, rack; Finntip 5 ml, rack Flex 200, rack; Flex 1000, rack; Finntip 10 ml, rack

Novus Stands

Order. No.	Description
9420340	Finnpipette Carousel Stand for 3 Novus
9420360	Novus stand (for 1 pipette)
9420390	Finnpipette Multichannel Stand (for 1 pipette)

year warranty

* All kits include Reagent Reservoirs demo pack and Finntip Sample Pack

Visit www.thermoscientific.com/glp

for application notes, videos and to learn good laboratory pipetting practices and techniques.

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^{***}The Functional volume range indicates the volume range that the pipette can cover in the Stepper, Sequential Stepper and Sequential Aspirate functions.