



Thermo Scientific Finnpiquette Novus Electronic Pipette

Meet Your New Favorite Pipette

Index-Finger Operation • Intuitive Programming • Ultimate Flexibility



"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 Birmingham, UK

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.



* RSI = Repetitive Strain Injury

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 µl, 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)

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

Rpipet (reverse & repetitive technique)

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.

Stepper

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

Dilute

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

Advanced Functions

Mix + Pipette

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

Pipette + Count

Mix and Pipette function adds automatic mixing after normal pipetting

Seq Stepper

Pipette + Count function adds automatic count number to pipetting

Mix + Dilute

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

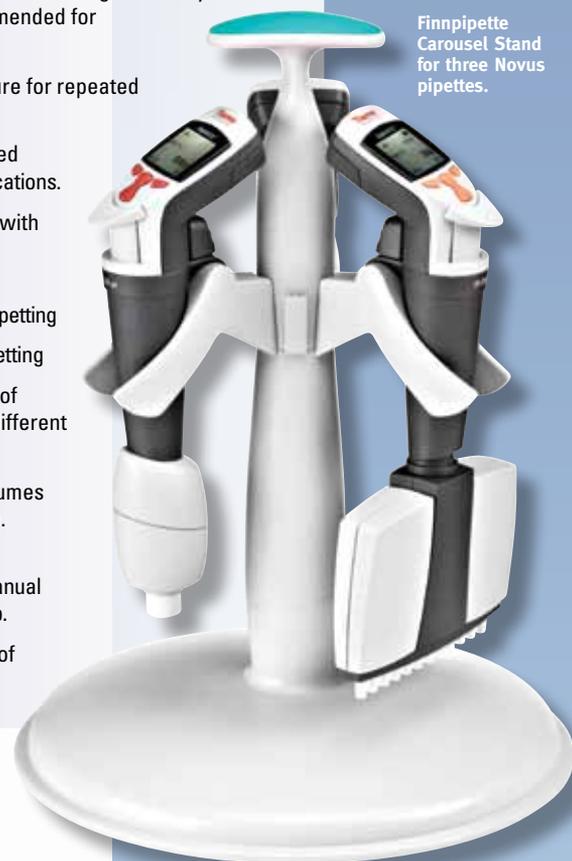
Manual

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.

Seq + Aspirate

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 Finn timer Novus Single Channel Specifications**

| Fisher Scientific Cat. No. | Range (calibration) | Range (functional****) | Increment | Volume μ l | Inaccuracy μ l | Inaccuracy % | Imprecision s.d.* μ l | Imprecision CV%* | Color code | Finntip |
|----------------------------|---------------------|------------------------|--------------|----------------|--------------------|--------------|---------------------------|------------------|------------|---------------------------------|
| 21377010 | 1-10 μ l | 0.5-10 μ l | 0.01 μ l | 10 | \pm 0.10 | \pm 1.0 | 0.05 | 0.5 | pink | Flex 10, 10, 20 micro, 50 micro |
| | | | | 1 | \pm 0.035 | \pm 3.5 | 0.03 | 3.0 | | |
| 21377011 | 1-10 μ l | 0.5-10 μ l | 0.01 μ l | 10 | \pm 0.10 | \pm 1.0 | 0.05 | 0.5 | yellow | Flex 200, 250 Univ., 200 Ext. |
| | | | | 1 | \pm 0.070 | \pm 7.0 | 0.06 | 6.0 | | |
| 21377012 | 5-50 μ l | 2.5-50 μ l | 0.1 μ l | 50 | \pm 0.40 | \pm 0.8 | 0.15 | 0.3 | turquoise | 50 |
| | | | | 5 | \pm 0.15 | \pm 3.0 | 0.125 | 2.5 | | |
| 21377013 | 5-50 μ l | 2.5-50 μ l | 0.1 μ l | 50 | \pm 0.40 | \pm 0.8 | 0.15 | 0.3 | yellow | Flex 200, 250 Univ., 200 Ext. |
| | | | | 5 | \pm 0.15 | \pm 3.0 | 0.125 | 2.5 | | |
| 21377014 | 10-100 μ l | 5-100 μ l | 0.1 μ l | 100 | \pm 0.80 | \pm 0.8 | 0.20 | 0.2 | yellow | Flex 200, 250 Univ., 200 Ext. |
| | | | | 10 | \pm 0.30 | \pm 3.0 | 0.10 | 1.0 | | |
| 21377015 | 30-300 μ l | 15-300 μ l | 1 μ l | 300 | \pm 1.8 | \pm 0.6 | 0.6 | 0.2 | orange | Flex 300, 300, |
| | | | | 30 | \pm 0.90 | \pm 3.0 | 0.21 | 0.7 | | |
| 21377016 | 100-1000 μ l | 50-1000 μ l | 1 μ l | 1000 | \pm 6.0 | \pm 0.6 | 2.0 | 0.2 | blue | Flex 1000, 1000, 1000 Ext. |
| | | | | 100 | \pm 3.0 | \pm 3.0 | 0.6 | 0.6 | | |
| 21377017 | 0.5-5 ml | 0.25-5 ml | 0.01 ml | 5000 | \pm 30.0 | \pm 0.6 | 10.0 | 0.2 | green | 5 ml |
| | | | | 500 | \pm 15.0 | \pm 3.0 | 4.0 | 0.8 | | |
| 21377018 | 1-10 ml | 0.5-10 ml | 0.01 ml | 10000 | \pm 60.0 | \pm 0.6 | 20.0 | 0.2 | red | 10 ml, Flex 10 ml Ext. |
| | | | | 1000 | \pm 30.0 | \pm 3.0 | 8.0 | 0.8 | | |

Thermo Scientific Finn timer Novus Multichannel Specifications**

| Fisher Scientific Cat. No. | Range (calibration) | Range (functional****) | Channels | Increment | Volume μ l | Inaccuracy μ l | Inaccuracy % | Imprecision s.d.* μ l | Imprecision CV%* | Color code | Finntip |
|----------------------------|---------------------|------------------------|----------|-------------|----------------|--------------------|--------------|---------------------------|------------------|------------|---------------------------------|
| 1438601 | 1-10 μ l | 0.5-10 μ l | 8 | 0.1 μ l | 10 | \pm 0.24 | \pm 2.4 | 0.16 | 1.6 | pink | Flex 10, 10, 20 micro, 50 micro |
| | | | | | 1 | \pm 0.12 | \pm 12.0 | 0.08 | 8.0 | | |
| 1438602 | 5-50 μ l | 2.5-50 μ l | 8 | 0.1 μ l | 50 | \pm 0.75 | \pm 1.5 | 0.35 | 0.7 | yellow | Flex 200, 200 Ext, 250 |
| | | | | | 5 | \pm 0.25 | \pm 5.0 | 0.10 | 2.0 | | |
| 1438603 | 30-300 μ l | 15-300 μ l | 8 | 1 μ l | 300 | \pm 3.0 | \pm 1.0 | 0.9 | 0.3 | orange | 300, Flex 300 |
| | | | | | 30 | \pm 1.5 | \pm 5.0 | 0.6 | 2.0 | | |
| 21377845 | 100-1200 μ l | 50-1200 μ l | 8 | 1 μ l | 1200 | \pm 12.00 | \pm 1.0 | 2.40 | 0.2 | turquoise | Flex 1200 |
| | | | | | 100 | \pm 3.00 | \pm 3.0 | 0.90 | 0.9 | | |
| 1438604 | 1-10 μ l | 0.5-10 μ l | 12 | 0.1 μ l | 10 | \pm 0.24 | \pm 2.4 | 0.16 | 1.6 | pink | Flex 10, 10, 20 micro, 50 micro |
| | | | | | 1 | \pm 0.12 | \pm 12.0 | 0.08 | 8.0 | | |
| 1438605 | 5-50 μ l | 2.5-50 μ l | 12 | 0.1 μ l | 50 | \pm 0.75 | \pm 1.5 | 0.35 | 0.7 | yellow | Flex 200, 200 Ext, 250 |
| | | | | | 5 | \pm 0.25 | \pm 5.0 | 0.10 | 2.0 | | |
| 1438606 | 30-300 μ l | 15-300 μ l | 12 | 1 μ l | 300 | \pm 3.0 | \pm 1.0 | 0.9 | 0.3 | orange | 300, Flex 300 |
| | | | | | 30 | \pm 1.5 | \pm 5.0 | 0.6 | 2.0 | | |
| 1438607 | 5-50 μ l | 2.5-50 μ l | 16 | 0.5 μ l | 50 | \pm 0.75 | \pm 1.5 | 0.35 | 0.7 | turquoise | 50 |
| | | | | | 5 | \pm 0.25 | \pm 5.0 | 0.10 | 2.0 | | |

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

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

Novus GLP Kits*

| Fisher Scientific Cat. No. | Description | Fisher Scientific Order No. | Description |
|----------------------------|--|-----------------------------|--|
| 14-386-104 | Novus GLP Kit 1 | 14-386-106 | Novus GLP Kit 3 |
| | Novus 10-100 μ l, single channel Novus 100-1000 μ l, single channel Two Finn timer Novus stands Finntip Flex 200, rack; Flex 1000, rack | | Novus 1-10 μ l, micro, single channel Novus 10-100 μ l, single channel Novus 100-1000 μ l, single channel Three Finn timer Novus pipette stands Flex 10, rack; Flex 200, rack; Flex 1000, rack |
| 14-386-105 | Novus GLP Kit 2 | 14-386-107 | Novus GLP Kit 4 |
| | Novus 100-1000 μ l, single channel Novus 0.5-5 ml, single channel Two Finn timer Novus stands Flex 1000, rack; Finntip 5 ml, rack | | Novus 10-100 μ l, single channel Novus 100-1000 μ l, single channel Novus 1-10 ml, single channel Three Finn timer Novus pipette stands Flex 200, rack; Flex 1000, rack; Finntip 10 ml, rack |

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

Novus Stands

| Fisher Scientific Cat. No. | Description |
|----------------------------|---|
| 21377002 | Finn timer Carousel Stand for 3 Novus |
| 1438721 | Novus stand (for 1 pipette) |
| 14245161 | Finn timer Multichannel Stand (for 1 pipette) |

Visit www.thermoscientific.com/glp for application notes, videos and to learn good laboratory pipetting practices and techniques.



Fisher Scientific:
For customer service, call 1-800-766-7000.
To fax an order, use 1-800-926-1166.
To order online: www.fishersci.com

Fisher HealthCare:
For customer service, call 1-800-640-0640.
To fax an order, use 1-800-290-0290.
To order online: www.fisherhealthcare.com

Fisher Scientific Canada:
For customer service, call 1-800-234-7437.
To fax an order, use 1-800-463-2996.
To order online: www.fishersci.ca

BN0819112



© 2011 Thermo Fisher Scientific Inc. All rights reserved. All trademarks are the property of Thermo Fisher Scientific Inc. and its subsidiaries. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local representative for details.

Thermo
SCIENTIFIC