

NEW: with integrated  
step counter



# Count on it!

The new Eppendorf Repeater® M4 and Combitips advanced® system:  
simple, stress-free and ergonomic



**Serial pipetting made easy**

The Repeater M4 makes performing long pipetting series easier and faster. The aspirated liquid can be dispensed up to 100 times without refilling the tip.



reddot design award  
winner 2013



## How it works

An Eppendorf Combitip advanced, in the required size, is simply attached and automatically recognized via a sensor in the Repeater M4. The volume is set using the selection dial and is automatically shown in the display (see table below). Now all you have to do is aspirate the liquid with the filling lever.

The desired volume can now be dispensed in several steps with the utmost precision. Dispense the same volume up to 100 times without refilling the tip—a logical solution for filling 96-well plates.

The executed dispensing steps are counted using the new step counter and shown in the easy-to-read display. After use, the Combitip advanced is simply ejected by pushing a button and disposed of without the risk of contamination or having to touch the tip.

Simple operation, unique flexibility and significant time savings make the Repeater M4 an important liquid handling tool for both novel research and routine tasks.

### Volume table for using the Combitips advanced with the Repeater M4

Position of the volume selection dial:

	0.5	1	1.5	2	2.5	3	3.5	4	4.5	5	5.5	6	6.5	7	7.5	8	8.5	9	9.5	10
<b>Maximum number of dispensing steps:</b>	100	50	33	25	20	16	14	12	11	10	9	8	7	7	6	6	5	5	5	5
<b>Dispensing volumes for each Combitip advanced®</b>																				
<b>0.1 mL</b>	1 µL	2 µL	3 µL	4 µL	5 µL	6 µL	7 µL	8 µL	9 µL	10 µL	11 µL	12 µL	13 µL	14 µL	15 µL	16 µL	17 µL	18 µL	19 µL	20 µL
<b>0.2 mL</b>	2 µL	4 µL	6 µL	8 µL	10 µL	12 µL	14 µL	16 µL	18 µL	20 µL	22 µL	24 µL	26 µL	28 µL	30 µL	32 µL	34 µL	36 µL	38 µL	40 µL
<b>0.5 mL</b>	5 µL	10 µL	15 µL	20 µL	25 µL	30 µL	35 µL	40 µL	45 µL	50 µL	55 µL	60 µL	65 µL	70 µL	75 µL	80 µL	85 µL	90 µL	95 µL	100 µL
<b>1.0 mL</b>	10 µL	20 µL	30 µL	40 µL	50 µL	60 µL	70 µL	80 µL	90 µL	100 µL	110 µL	120 µL	130 µL	140 µL	150 µL	160 µL	170 µL	180 µL	190 µL	200 µL
<b>2.5 mL</b>	25 µL	50 µL	75 µL	100 µL	125 µL	150 µL	175 µL	200 µL	225 µL	250 µL	275 µL	300 µL	325 µL	350 µL	375 µL	400 µL	425 µL	450 µL	475 µL	500 µL
<b>5 mL</b>	50 µL	100 µL	150 µL	200 µL	250 µL	300 µL	350 µL	400 µL	450 µL	500 µL	550 µL	600 µL	650 µL	700 µL	750 µL	800 µL	850 µL	900 µL	950 µL	1.0 mL
<b>10 mL</b>	100 µL	200 µL	300 µL	400 µL	500 µL	600 µL	700 µL	800 µL	900 µL	1.0 mL	1.1 mL	1.2 mL	1.3 mL	1.4 mL	1.5 mL	1.6 mL	1.7 mL	1.8 mL	1.9 mL	2.0 mL
<b>25 mL*</b>	250 µL	500 µL	750 µL	1.0 mL	1.25 mL	1.5 mL	1.75 mL	2.0 mL	2.25 mL	2.5 mL	2.75 mL	3.0 mL	3.25 mL	3.5 mL	3.75 mL	4.0 mL	4.25 mL	4.5 mL	4.75 mL	5.0 mL
<b>50 mL*</b>	500 µL	1.0 mL	1.5 mL	2.0 mL	2.5 mL	3.0 mL	3.5 mL	4.0 mL	4.5 mL	5.0 mL	5.5 mL	6.0 mL	6.5 mL	7.0 mL	7.5 mL	8.0 mL	8.5 mL	9.0 mL	9.5 mL	10 mL

\*The 25 mL and 50 mL Combitips advanced can only be used with the supplied adapter.



### The right Combitip advanced is always at your fingertips!

9 different volume sizes (0.1 mL–50 mL) for the Combitips advanced, along with the Repeater M4, offer a unique volume range of 1 µL–10 mL. With 4 different purity grades (Eppendorf Quality™, PCR Clean, Sterile, Eppendorf Biopur®), you will always find the right tip for your application. All Eppendorf Combitips advanced are manufactured without the use of slip agents—substances that have been shown to leach from plastic consumables into the sample and negatively affect bio-assay results.

# The new Eppendorf Repeater M4— Reaching beyond a pipette's limitations

The ideal precision instrument for completing long pipetting or dispensing series. Even liquids which are difficult to pipette are no match for the Repeater M4.

On the Repeater/Combitip system, volumes are dispensed using the positive displacement principle. The liquid is directly dispensed without an air cushion, ensuring the correct volume, regardless of the density,

viscosity and volatility of the liquid. In addition to serial dispensing, the Repeater is also the perfect instrument that is able to go beyond the limitations of a standard pipette.



## Innovations at a glance

- > Light weight and ergonomic
- > Perfectly shaped for large or small hands
- > Weight is well balanced for fatigue-free handling
- > Stress-free work via integrated step counter:
  - dispensing procedures can be continued error-free after an interruption or distraction
- > Central Combitip ejector: fully emptied Combitip can be easily ejected with one hand using the operating lever

**Count on it!** The clearly arranged and easy-to-read display guarantees stress-free and intuitive operation. In addition to the displayed dispensing volume, the step counter supports error-free filling, for example 96-well plates.

The integrated »Sleep« function switches off the Repeater M4 when not in use, thus reducing energy consumption and saving battery life.

**Technical specifications** (information refers to the Repeater M4/Combitips advanced system)

Combitips advanced	Min. dispensing volume	Max. dispensing volume	Increment	Dispensing volume	Systematic error <sup>1</sup>	Random error <sup>1</sup>
0.1 mL	1 µL	20 µL	1 µL	2 µL 20 µL	± 1.6% ± 1.0%	± 3.0% ± 2.0%
0.2 mL	2 µL	40 µL	2 µL	4 µL 40 µL	± 1.3% ± 0.8%	± 2.0% ± 1.5%
0.5 mL	5 µL	100 µL	5 µL	10 µL 100 µL	± 0.9% ± 0.8%	± 1.5% ± 0.6%
1 mL	10 µL	200 µL	10 µL	20 µL 200 µL	± 0.9% ± 0.6%	± 0.9% ± 0.4%
2.5 mL	25 µL	500 µL	25 µL	50 µL 500 µL	± 0.8% ± 0.5%	± 0.8% ± 0.3%
5 mL	50 µL	1,000 µL	50 µL	100 µL 1,000 µL	± 0.6% ± 0.5%	± 0.6% ± 0.25%
10 mL	100 µL	2,000 µL	100 µL	200 µL 2,000 µL	± 0.5% ± 0.5%	± 0.6% ± 0.25%
25 mL	250 µL	5,000 µL	250 µL	500 µL 5,000 µL	± 0.4% ± 0.3%	± 0.6% ± 0.25%
50 mL	500 µL	10,000 µL	500 µL	1,000 µL 10,000 µL	± 0.3% ± 0.3%	± 0.5% ± 0.3%

<sup>1</sup> The data for systematic and random errors, according to EN ISO 8655, only apply if original Eppendorf Combitips advanced are used.

**Repeater M4 ordering information**

Description	Catalog No.
<b>Repeater M4</b> , includes Repeater M4, Combitip Rack, Combitip assortment pack and wall/carousel holder	4982000322
<b>Eppendorf TrackIT</b> includes software and RFID reader	3903000014

**Ordering information for Combitips advanced and accessories**

Combitips advanced	Color coding	Eppendorf Quality box of 100 pcs. (4 bags × 25 pcs.)	PCR clean <sup>2</sup> box of 100 pcs. (4 resealable bags × 25 pcs.)	Sterile <sup>3</sup> box of 100 pcs. (individually wrapped)	Eppendorf Biopur <sup>4</sup> box of 100 pcs. (individually wrapped)
0.1 mL	□ White	0030089405	0030089766	0030089510	0030089618
0.2 mL	■ Light blue	0030089413	0030089774	0030089529	0030089626
0.5 mL	■ Purple	0030089421	0030089782	0030089537	0030089634
1 mL	■ Yellow	0030089430	0030089790	0030089545	0030089642
2.5 mL	■ Green	0030089448	0030089804	0030089553	0030089650
5 mL	■ Blue	0030089456	0030089812	0030089561	0030089669
10 mL	■ Orange	0030089464	0030089820	0030089570	0030089677
25 mL <sup>5</sup>	■ Red	0030089472	0030089839	0030089588	0030089685
50 mL <sup>5</sup>	■ Light gray	0030089480	0030089847	0030089596	0030089693
<b>Accessories</b>					
25 mL adapter (1 pc.)	■ Red	0030089715			
25 mL adapter (7 pcs.)	■ Red				0030089731
50 mL adapter (1 pc.)	■ Light gray	0030089723			
50 mL adapter (7 pcs.)	■ Light gray				0030089740
Combitips advanced assortment pack (1 Combitip of each size, incl. adapters)		0030089936			
Combitip Rack (for 8 Combitips advanced, 0.1 mL–10 mL)		0030089758			

<sup>2</sup> PCR clean: batch tested and certified to be free of: human DNA, DNase, RNase, PCR inhibitors

<sup>3</sup> Sterile: batch tested and certified to be sterile and Pyrogen-free

<sup>4</sup> Biopur: batch tested and certified to be sterile and free of: human and bacterial DNA, DNase, RNase, PCR inhibitors, ATP, Pyogen

<sup>5</sup> 4 boxes of 25 pcs. each, each box contains an adapter.

Eppendorf North America, Inc.  
 Phone: 800-645-3050  
 Email: info@eppendorf.com  
 Eppendorf Canada Ltd.  
 Phone: 800-263-8715  
 Email: canada@eppendorf.com

www.eppendorfna.com