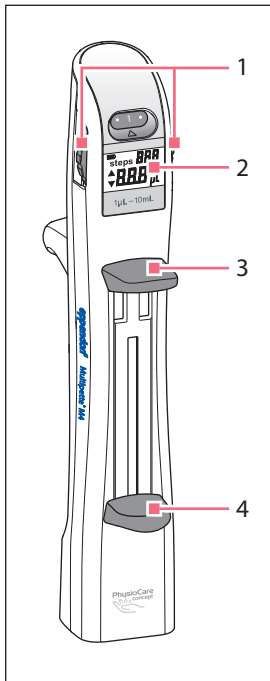


These short instructions are a supplement to the operating manual and not a substitute.
Please read the operating manual before using the Multipette M4 / Repeater M4 for the first time!

General view



1 Selection dial

There are 20 volume selection settings available.

2 Display

- switches on automatically when a Combitip advanced is inserted
- switches off automatically after an interval of non-use
- switches on if moved with inserted Combitip advanced

Example of a display with the Combitip advanced inserted:



steps during volume selection

Display of the possible dispensing steps for a Combitip advanced that has been filled to capacity.

steps during dispensing

Display of the dispensing steps that have been carried out.
Counting the steps up to 999, if Combitip advanced is filled to capacity repeatedly.

Counting re-starts, when Combitip advanced has been emptied.

Volume

1 µL – 10 mL. Depends on the selection dial setting and the Combitip advanced

3 Operating lever

For dispensing the liquid or for ejecting the empty Combitip advanced.
Push filling lever down before ejecting Combitip advanced with operating lever.

4 Filling lever

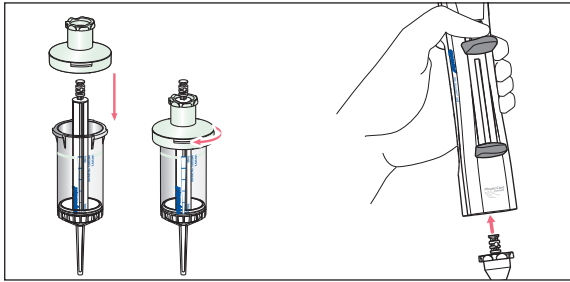
For filling or emptying the Combitip advanced.

Adjustable dispensing volumes for Combitip advanced

Multipette M4 / Repeater M4 can only be operated with the Combitip advanced!

Selection dial	Dispensingsteps	0,1 mL	0,2 mL	0,5 mL	1,0 mL	2,5 mL	5,0 mL	10 mL	25 mL	50 mL
		white	light blue	purple	yellow	green	blue	orange	red	light gray
.	100	1,0 µL	2,0 µL	5,0 µL	10 µL	25 µL	50 µL	0,1 mL	0,25 mL	0,5 mL
1	50	2,0 µL	4,0 µL	10 µL	20 µL	50 µL	100 µL	0,2 mL	0,50 mL	1,0 mL
.	33	3,0 µL	6,0 µL	15 µL	30 µL	75 µL	150 µL	0,3 mL	0,75 mL	1,5 mL
2	25	4,0 µL	8,0 µL	20 µL	40 µL	100 µL	200 µL	0,4 mL	1,00 mL	2,0 mL
.	20	5,0 µL	10 µL	25 µL	50 µL	125 µL	250 µL	0,5 mL	1,25 mL	2,5 mL
3	16	6,0 µL	12 µL	30 µL	60 µL	150 µL	300 µL	0,6 mL	1,50 mL	3,0 mL
.	14	7,0 µL	14 µL	35 µL	70 µL	175 µL	350 µL	0,7 mL	1,75 mL	3,5 mL
4	12	8,0 µL	16 µL	40 µL	80 µL	200 µL	400 µL	0,8 mL	2,00 mL	4,0 mL
.	11	9,0 µL	18 µL	45 µL	90 µL	225 µL	450 µL	0,9 mL	2,25 mL	4,5 mL
5	10	10 µL	20 µL	50 µL	100 µL	250 µL	500 µL	1,0 mL	2,50 mL	5,0 mL
.	9	11 µL	22 µL	55 µL	110 µL	275 µL	550 µL	1,1 mL	2,75 mL	5,5 mL
6	8	12 µL	24 µL	60 µL	120 µL	300 µL	600 µL	1,2 mL	3,00 mL	6,0 mL
.	7	13 µL	26 µL	65 µL	130 µL	325 µL	650 µL	1,3 mL	3,25 mL	6,5 mL
7	7	14 µL	28 µL	70 µL	140 µL	350 µL	700 µL	1,4 mL	3,50 mL	7,0 mL
.	6	15 µL	30 µL	75 µL	150 µL	375 µL	750 µL	1,5 mL	3,75 mL	7,5 mL
8	6	16 µL	32 µL	80 µL	160 µL	400 µL	800 µL	1,6 mL	4,00 mL	8,0 mL
.	5	17 µL	34 µL	85 µL	170 µL	425 µL	850 µL	1,7 mL	4,25 mL	8,5 mL
9	5	18 µL	36 µL	90 µL	180 µL	450 µL	900 µL	1,8 mL	4,50 mL	9,0 mL
.	5	19 µL	38 µL	95 µL	190 µL	475 µL	950 µL	1,9 mL	4,75 mL	9,5 mL
10	5	20 µL	40 µL	100 µL	200 µL	500 µL	1 000 µL	2,0 mL	5,00 mL	10,0 mL

Insert Combitip advanced



- **For 25 mL and 50 mL Combitips advanced only**

Before inserting fit the Adapter advanced and tighten.

Identical color code for Adapter advanced and Combitip advanced:

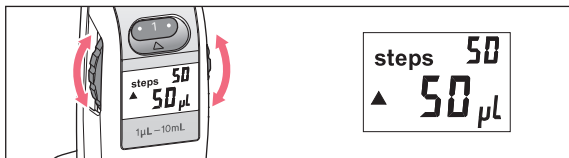
red = 25 mL

light gray = 50 mL

- **Easy to insert**

Push and hold the operating lever while inserting the Combitip advanced

Volume selection and steps



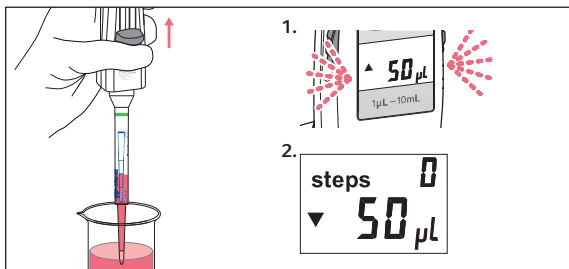
Select the dispensing volume using the selection dial.

Display of

- steps: possible dispensing steps*
- volume in µL oder mL

The volume can be changed in between dispensing steps.

Filling the Combitip advanced and reverse stroke



1. Filling

Immerse the Combitip advanced into the liquid to be aspirated and pull the filling lever slowly up as far as it will go. The display flashes.

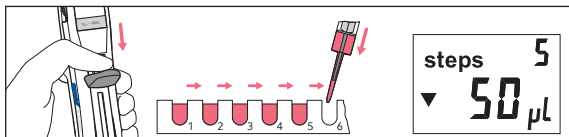
2. Reverse stroke

Push the operating lever and trigger a reverse stroke.*

The reverse stroke is not a dispensing step!

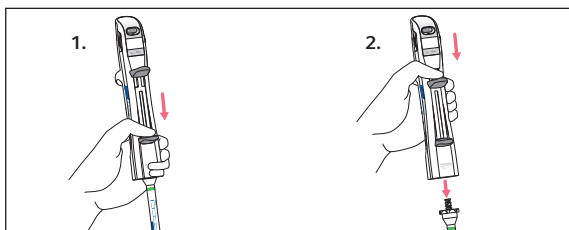
After reverse stroke: Display does not flash - display of steps: 0

Dispensing procedure



Push the **operating lever** slowly as far as it will go. **steps*** displays the dispensing steps that were carried out.

Emptying and ejecting the Combitip advanced



1. Push the **filling lever** down as far as it will go. This will empty the Combitip advanced.

2. Push the **operating lever** to eject the Combitip advanced.

3. For 25 mL and 50 mL Combitip advanced: Release the Adapter advanced from the Combitip advanced.

* For special procedure for partially filled Combitips advanced refer to the operating manual for Multipipette M4/Repeater M4.