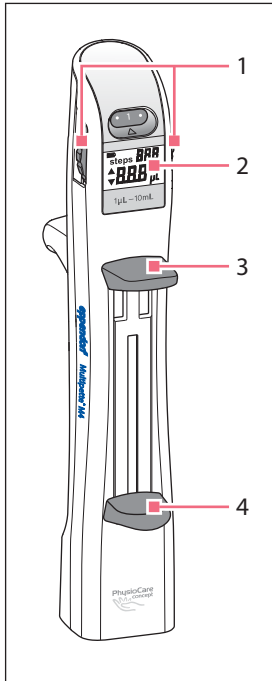


These short instructions are a supplement to the operating manual and not a substitute.
Please read the operating manual before using the Multipette M4/Repeater M4 for the first time.

General view



1 Selection dial

There are 20 volume selection settings available.

2 Display

- Switches on automatically when a dispensing tip is inserted
- Switches off automatically after a certain period of non-use
- Switches on if moved with inserted dispensing tip

Example of a display with a dispensing tip inserted:



steps during volume selection

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

steps during dispensing

Display of the dispensing steps that have been carried out.

The steps are counted up to 999, if dispensing tip is filled to capacity repeatedly.

Counting re-starts, when dispensing tip has been emptied.

Volume

1 µL – 10 mL. Depends on the selection dial setting and the dispensing tip.

3 Operating lever

For dispensing the liquid or for ejecting the empty dispensing tip.

Push filling lever down before ejecting dispensing tip with operating lever.

4 Filling lever

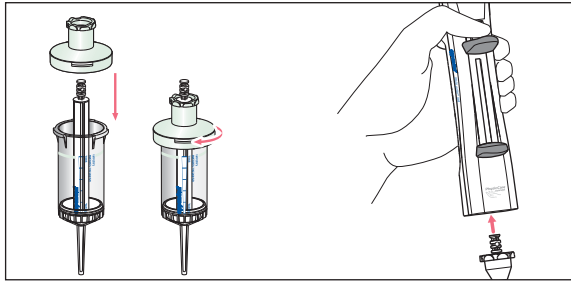
For filling or emptying the dispensing tip.

Adjustable dispensing volumes for dispensing tips

Multipette M4/Repeater M4 can only be operated with a dispensing tip Combitips advanced or ViscoTip.

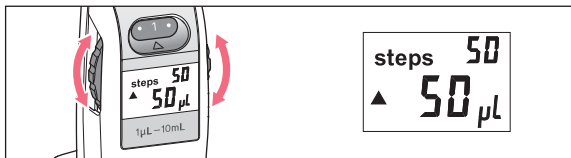
Selection dial	Dispensingsteps	0,1 mL	0,2 mL	0,5 mL	1,0 mL	2,5 mL	5,0 mL	10 mL	25 mL	50 mL
		white	light blue	purple	yellow	green	blue	orange	red	light gray
.	100	1.0 µL	2.0 µL	5.0 µL	10 µL	25 µL	50 µL	0.1 mL	0.25 mL	0.5 mL
1	50	2.0 µL	4.0 µL	10 µL	20 µL	50 µL	100 µL	0.2 mL	0.50 mL	1.0 mL
.	33	3.0 µL	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	1000 µL	2.0 mL	5.00 mL	10.0 mL

Inserting the dispensing tip



- **For 25 mL and 50 mL Combitips advanced only**
Before inserting, fit the Adapter advanced and tighten.
Identical color code for Adapter advanced and Combitips advanced:
red = 25 mL
light gray = 50 mL
- **Easy to insert**
Push and hold the operating lever while inserting the dispensing tip

Volume selection and steps



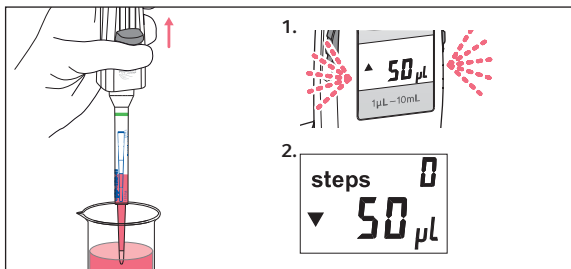
Select the dispensing volume using the selection dial.

Display of

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

The volume can be changed in between dispensing steps.

Filling the dispensing tip and reverse stroke



1. Filling

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

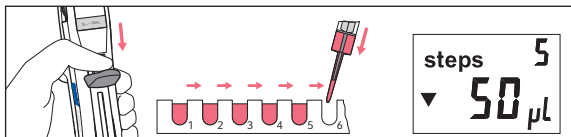
2. Reverse stroke

Push the operating lever and trigger a reverse stroke.*

The reverse stroke is not a dispensing step!

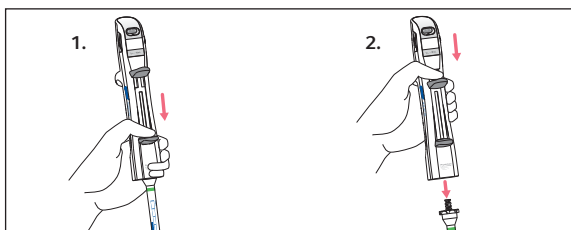
After reverse stroke: Display does not flash - display of steps: 0

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 dispensing tip



1. Push the **filling lever** down as far as it will go. This will empty the dispensing tip.
2. Push the **operating lever** all the way down. The dispensing tip is ejected.
3. For 25 mL and 50 mL Combitips advanced: Release the Adapter advanced from the Combitips advanced.

* For special procedure for partially filled dispensing tip refer to the operating manual for Multipette M4/Repeater M4.