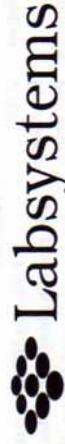
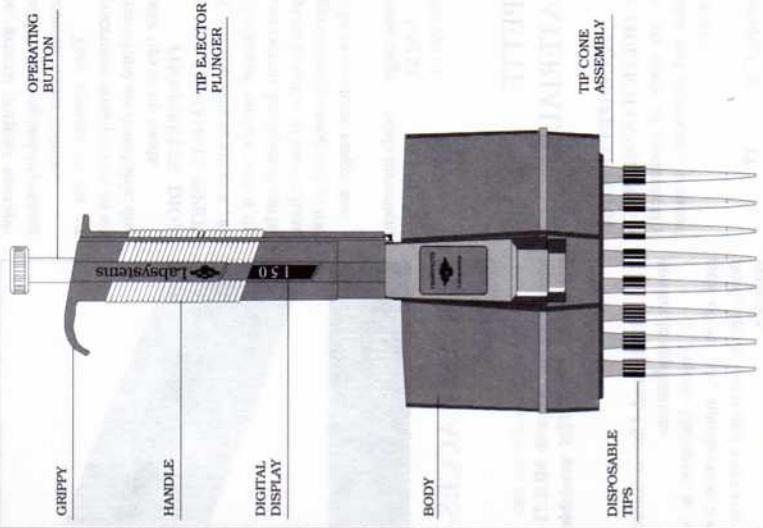
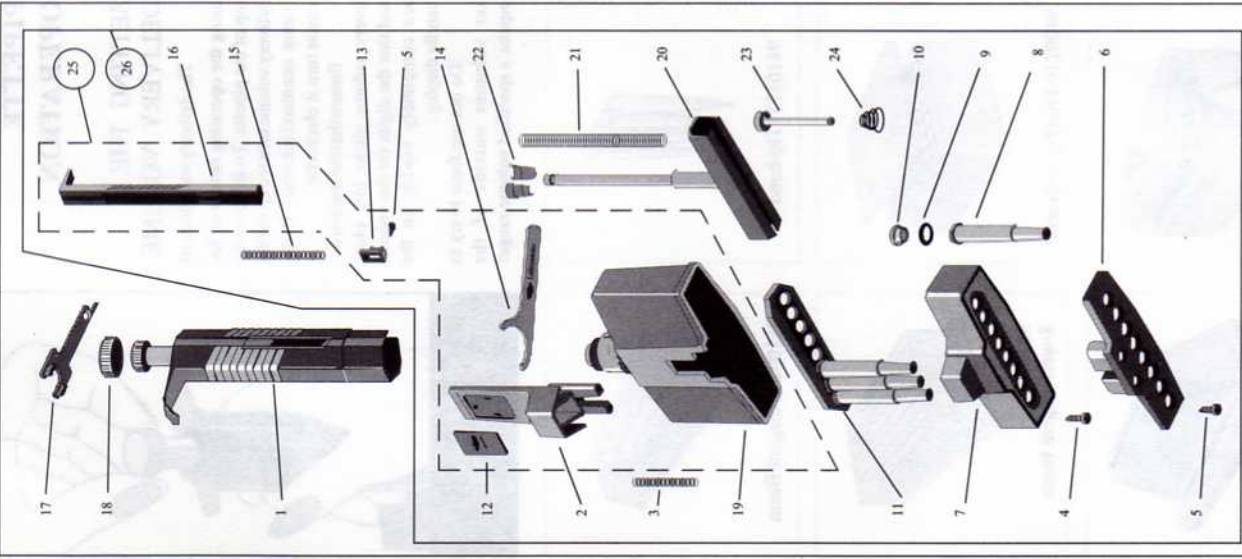


# FINNPIPETTE DIGITAL MULTICHANNEL PIPETTES INSTRUCTIONS FOR USE



Pulittie 8, 00880 Helsinki, Finland  
 Telefax +358-0-7591479, Tel.+358-0-75821

Your nearest Dealer:



## SPARE PARTS

Description	Code
1. Handle (incl. item 18)	2203161 5-50 ul 2203231 50-300 ul
2. Tip ejector	1058490
3. Tip ejector spring	1130111
4. Body assembly cover screw	0202061
5. Tip ejector screw	0202021
6. Tip ejector plate	1055990 4-channel 1056000 8-channel 1056010 12-channel
7. Body assembly cover	1055960 4-channel 1055970 8-channel 1055980 12-channel
8. Tip cone	1058560 5-50 ul 1058570 50-300 ul
9. O-ring	1030480 5-50 ul 1030260 50-300 ul
10. Collar	1056030 5-50 ul 1056040 50-300 ul
11. Tip cone holder	1056080 4-channel 1056090 8-channel 1056100 12-channel 1056110 4-channel 1056120 8-channel 1056130 12-channel
12. Label	1525720
13. Tip ejector plunger holder	1054820
14. Wrench	1058170
15. Tip ejector plunger spring	1130740
16. Tip ejector plunger	1058480
17. Calibration key	1053630
18. Cap	1057500 5-50 ul 1057520 50-300 ul
19. Body	2202910 4-channel 2202920 8-channel 2202930 12-channel
20. Piston holder	1054522 5-50 ul 1054532 5-50 ul 1054542 12-channel 1054523 4-channel 1054533 8-channel 1054543 12-channel 1130680 4+8-channel 1130720 12-channel
21. Holder spring	1058180
22. Locking pieces	2201240 5-50 ul
23. Piston	2202940 50-300 ul
24. Piston spring	1130210 5-50 ul 1131630 50-300 ul
<b>UPDATE AND REPLACEMENT KITS</b>	
25. Update Kit including items 2,5,12,13,14,16 and 19	2203641 4-channel 2203651 8-channel 2203661 12-channel
26. Body assembly including items 2-16 and 19-24	2203200 5-50 ul 2203140 8-channel 2203190 12-channel 2203220 4-channel 2203180 8-channel 2203210 12-channel 50-300 ul 50-300 ul

1960051

## PRODUCT DESCRIPTION

FINNPIPEPETTE DIGITAL MULTICHANNEL PIPETTES are handheld, adjustable volume, general purpose micropipettes for sampling and dispensing of accurate liquid volumes.

They operate on the air displacement principle (i.e. an air interface) and use detachable, disposable tips or tip bands.

FINNPIPEPETTE DIGITAL MULTICHANNEL PIPETTES are available as either 4-, 8- or 12-channel models with a tip ejector system. Each model can be supplied in either of two volume ranges covering a total of 5 to 300 µl. The two volume ranges are:

Volume range	Scale Increment
5-50 µl	0,5 µl
50-300 µl	5,0 µl

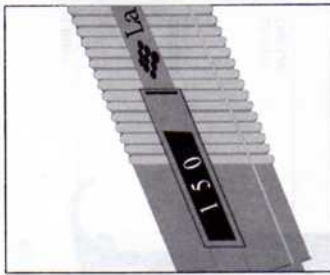
## PIPETTE MATERIALS

FINNPIPEPETTE DIGITAL MULTICHANNEL PIPETTES are made of mechanically durable and chemically resistant materials.

Operating Cap	PP
Operating Button	ABS
Handle	Polyamide
Tip ejector plunger	Polyamide
Tip ejector	Polyamide
Tip cones	PC
Pipette body	Polyamide
Tip ejector plate	PC

## DIGITAL DISPLAY

The adjusted delivery volume is clearly indicated by a digital display on the pipette handle.



## THE DIGITAL DISPLAY

## TIPS AND ACCESSORIES

Three tip models are recommended for use with MULTICHANNEL PIPETTES available from LabSystems.

1. Tip band-4 for economic nonsterile applications.
  2. FinnTip Universal in a rack of 96 pcs, autoclavable for sterile applications and extra convenience.
  3. FinnTip 300 µl in a rack of 96 pcs with a hinged lid, autoclavable for sterile applications. This is especially recommended for use with the FPD 50-300 µl MULTICHANNEL PIPETTE, while it allows reverse pipetting technique with full volume range.
- Other accessories are helpful in pipetting of reagents and in the handling of the pipettes:

4. Reagent basin
5. 8-well reagent basin
6. Pipette stand

## PIPETTE OPERATION

### SETTING THE DELIVERY VOLUME

The delivery volume is set using the operating button on the top of the pipette. To increase the delivery volume turn the operating button counterclockwise. To decrease turn it clockwise.

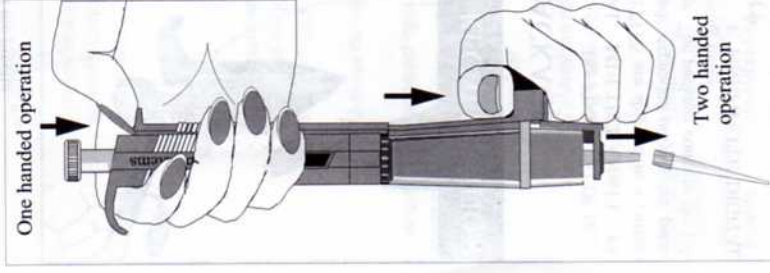
Ensure that the desired delivery volume clicks into place and that the digits for the volume are completely visible on the handle display.

Do not use force to try to set volumes outside of the pipette's specified volume range!

## TIP EJECTION

Each pipette is fitted with a tip ejector system to help eliminate the possibility of contamination. For tip ejection, two methods are available:

A. If one-handed operation is preferred, twist the pipette handle so that the tip ejector plunger and tip ejector on the body assembly are in line. Press the tip ejector plunger with your thumb directing the tips towards a suitable waste receptacle.



## TIP EJECTION

## MAINTENANCE

When the FINNPIPEPETTE DIGITAL MULTICHANNEL PIPETTE is not in use make sure it is safely stored in a vertical position, preferably on a Finn pipette Stand.

## SHORT TERM CHECKING

The pipette should be checked at the beginning of each day for dust and dirt on outside surfaces of the pipette.

Particular attention should be paid to the tip cones. Solvents should not be used for cleaning the pipette.

## LONG TERM MAINTENANCE

If the pipette is used daily it should be checked at least twice a year. The servicing procedure is as follows:

1. Unscrew the two screws on the tip ejector plate and remove it.
2. Unscrew the eight screws (four screws in 4-channel model) on the body assembly cover and remove it.
3. Remove the tip ejector with the spring.
4. Depress the operating button all the way down. Remove the tip cone holder with the tip cones.
5. Clean the pistons and O-rings with a dry napless cloth and grease them slightly with high vacuum silicone grease (included in the package).