



# ***DISCOVERY PRO***

*single & multichannel pipettes*



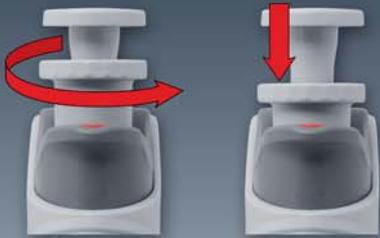
ERGONOMICS  
• SUPERIOR •  
PERFORMANCE

***SCIENCE AT YOUR FINGERTIPS***

# DISCOVERY PRO

## single channel pipette

Creating new products HTL always focuses on ergonomics, accuracy and precision. The new single and multichannel DISCOVERY PRO pipette series is uniquely dedicated to the three key features. The contoured shape of the handle and finger-hook guarantee correct grip reducing wrist strain and fatigue. The tip ejection force is reduced by more than 30% thanks to the unique pushbutton-lever system. In addition to the outstanding comfort, the new DISCOVERY PRO pipette offers quick and easy volume settings even when used with gloves. All DISCOVERY PRO pipette models are fully autoclavable (121°C/ 100kPa/ 20 min.) and can be safely sterilized with UV radiation.



**VOLUME SETTING & LOCKING**  
mechanism enables  
one-handed operation

**VERY FAST  
COUNTER REWINDING**  
for quick and easy volume  
adjustment

**THERMAL INSULATION**  
of internal parts improves  
accuracy

**DURABLE  
SEALING SYSTEM**  
- effective for over 60k cycles



**USER CALIBRATION**  
with the calibration  
switch and key



**VOLUME RANGE  
COLOUR-CODING**  
for easy pipette  
and tip selection

**4-DIGIT COUNTER**  
located on the front  
side remains visible  
at all time



**ULTRA LIGHT WEIGHT  
& EXTREMELY LOW  
PIPETTING FORCES**  
for exceptional comfort

**LONG TIP EJECTOR STROKE**  
to accommodate virtually  
all brands of tips

**EASY MAINTENANCE**  
thanks to the revolutionary internal construction



## User calibration

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Remove the colour cap using the calibration key. Set the calibration switch in its upper position.



Insert the calibration key into the ejector orifice. Turn the key so as the volume indicated by the counter is equal to the average calculated volume.



Remove the calibration key and set the calibration switch in its lower position. Place the cap on the ejector button.

3 easy steps

## Easy maintenance

All pipettes require periodic maintenance, depending on the applications performed and intensity of use. The subassemblies subject to action of aggressive solution vapors, such as shaft elements, should be regularly inspected and cleaned. Regular cleaning and maintenance will help to ensure the continuous performance of a pipette. The DISCOVERY PRO has been designed for easy cleaning and maintenance. External surfaces of the handgrip, knob and pushbuttons may be cleaned with a tissue dipped in isopropyl alcohol. The remaining elements removed from the pipette during disassembly can be washed with distilled water or isopropyl alcohol. It is not necessary to disassemble the entire set to inspect and clean the shaft.\*

- Unscrew the shaft from the shaft holder set.



- When the shaft is removed, the seal and the o-ring are automatically moved out of the shaft holder set to make maintenance as easy as possible.



\* Pipette volumes 2-100  $\mu$ l

# DISCOVERY PRO

## multichannel pipette

DISCOVERY PRO multichannel pipette is equipped with volume setting/locking mechanism, 4-digit counter and also soft thumb-friendly spring-system, which guarantees smooth pipetting of 8 and 12-channels. Thanks to the innovative pipette construction all internal components are thermally insulated from the handle therefore eliminating heat transfer from the hand and ensuring pipette accuracy. DISCOVERY PRO multichannels feature a revolutionary suspension system that ensures secure tip sealing and also eliminates the common incidence of tips being jammed on pipette outer shafts. The curved ejection bar allows tips to be pushed off in steps, therefore reducing the amount of force required for ejection.

**THERMAL INSULATION**  
of internal parts improves accuracy

**PUSHBUTTON-LEVER SYSTEM**  
reduces ejection force by over 30%!



**360° MANIFOLD**  
for optimal working comfort

**ERGONOMIC HANDLE DESIGN**  
suitable for small or large hands



**DURABLE SEALING SYSTEM**  
- effective for over 60k cycles

**FULLY AUTOCLAVABLE**  
121°C/ 100 kPa/20 min.



**UV RESISTANT BODY**  
can be safely sterilized with UV radiation

**SEQUENTIAL TIP EJECTOR**  
allows tip ejecting with minimum effort

**TIP LOADING MECHANISM**  
for perfect tip sealing



# DISCOVERY PRO pipette series

## ordering information

Model	Cat. no.	Colour code	Volume ( $\mu$ l)	A(%)	P(%)	Fit to tips ( $\mu$ l)	
DP2*	6001	Red	0.2	$\pm 12.0$	$\pm 6.0$	10	
			1.0	$\pm 2.7$	$\pm 1.3$		
DP10	6002	Red	Max 2.0	$\pm 1.5$	$\pm 0.7$		
			Min 0.5	$\pm 4.0$	$\pm 2.8$		
DP10	6002	Red	5.0	$\pm 1.0$	$\pm 0.6$		
			Max 10.0	$\pm 0.5$	$\pm 0.4$		
DP20	6003	Yellow	Min 2	$\pm 3.0$	$\pm 1.5$		200
			10	$\pm 1.0$	$\pm 0.5$		
DP20	6003	Yellow	Max 20	$\pm 0.8$	$\pm 0.3$		
			Min 10	$\pm 1.6$	$\pm 0.80$		
DP100	6004	Yellow	50	$\pm 0.8$	$\pm 0.24$		
			Max 100	$\pm 0.8$	$\pm 0.20$		
DP200	6005	Yellow	Min 20	$\pm 1.2$	$\pm 0.60$	1000	
			100	$\pm 0.8$	$\pm 0.25$		
DP200	6005	Yellow	Max 200	$\pm 0.6$	$\pm 0.20$		
			Min 100	$\pm 1.6$	$\pm 0.40$		
DP1000	6006	Blue	500	$\pm 0.7$	$\pm 0.20$		
			Max 1000	$\pm 0.6$	$\pm 0.15$		
DP8-10 DP12-10	5951 5955	Red	Min 1	$\pm 8.0$	$\pm 6.0$		10
			5	$\pm 4.0$	$\pm 2.0$		
DP8-10 DP12-10	5951 5955	Red	Max 10	$\pm 2.0$	$\pm 1.2$		
			Min 5	$\pm 4.0$	$\pm 2.5$		
DP8-50 DP12-50	5952 5956	Yellow	25	$\pm 3.0$	$\pm 1.2$	200	
			Max 50	$\pm 1.6$	$\pm 0.6$		
DP8-200 DP12-200	5953 5957	Yellow	Min 20	$\pm 3.0$	$\pm 1.5$		
			100	$\pm 1.5$	$\pm 0.8$		
DP8-200 DP12-200	5953 5957	Yellow	Max 200	$\pm 1.0$	$\pm 0.6$		
			Min 50	$\pm 1.6$	$\pm 1.5$		
DP8-300 DP12-300	5954 5958	Green	150	$\pm 1.2$	$\pm 1.0$		300
			Max 300	$\pm 1.0$	$\pm 0.6$		



\* The DP2 minimum volume is 0.1  $\mu$ l

## Quality control certificate

QUALITY CONTROL CERTIFICATE			
<p>PE HTL S.A. is in possession of a registered and certified quality management system, which includes the development, production and sales of high quality Liquid Handling products.</p> <p>Each instrument passes stringent validation and Control Procedures in accordance with EN ISO 8655.</p> <p>All HTL manual pipettes are CE marked.</p>			
<p><b>Model:</b> DP100</p> <p><b>Serial:</b> 060040001</p> <p><b>Cat.No.:</b> 6004</p> <p><b>Date:</b> 23.11.10</p> <p><b>Tested by:</b> B02</p> <p><b>Status:</b> Passed</p>	<p><b>Volume (<math>\mu</math>l) :</b> 10.000</p> <p><b>Accuracy (%) :</b> 0.263</p> <p><b>Precision (%) :</b> 0.115</p>	<p><b>Volume (<math>\mu</math>l) :</b> 100.00</p> <p><b>Accuracy (%) :</b> 0.260</p> <p><b>Precision (%) :</b> 0.113</p>	
<p>Tested with distilled water: Condition of measurements: Basis of adjustment: EX; Reference temperature: 20°C; Relative air humidity: 50%; Barometric pressure: 101kPa PE HTL S.A. Daniszewska 4, 03-230 Warsaw, Poland.</p>			

Each HTL pipette is supplied with an individual QC certificate, attesting the strict factory control and excellent performance values obtained. Conformity to ISO 8655 and IVD 98/79/EC Directives. The production standards set by the manufacturing quality management systems – certified to ISO 9001/2000.



## Starter 4 PACK



DISCOVERY PRO STARTER 4 PACK (cat. no. 7903) creates an interesting opportunity for all users who are just starting to equip their laboratory, or who decided to switch to HTL pipetting system. The starter pack includes four pipettes: DP10, DP20, DP200, DP1000, four position universal linear stand and also three racks of HTL pipette tips. Each STARTER 4 PACK is delivered with some useful accessories:

- calibration keys
- pipette hangers
- instruction manuals

## HTL pipette tips

HTL Pipette Tips are designed to fit a wide variety of single and multichannel pipettes. Flexible walls and the diameter of tips collars ensure a secure fit with less force required to load and eject. All pre-sterilized tips are exposed to e-beam radiation for complete security without degrading the plastic or performance. Tips are manufactured in one of the most technically advanced plastic disposable production facility in clean room conditions. HTL Pipette Tips are certified to be free from bio active contaminants as RNase, DNase or pyrogens. HTL tips are offered in standard, sterile and filtered versions in all popular packaging formats:



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