



WORLD
PRECISION
INSTRUMENTS
Instrumenting scientific ideas

Nanoliter Injector with Standard Controller

For oocyte injection and applications where glass micropipettes are preferred

Reversing mount 180° will reduce manipulator-to-tip distance by 10cm.

Universal
Adapter for Nanoliter
Injector

Mounting Rod:
8.0 Ø x 50mm



Total volume in
pipette: 26mm =
4.8µL

**Micromanipulator
is sold separately.*

Features

- Microprocessor-controlled injector
- Direct piston displacement in capillary glass
- Discrete aliquot injections in 16 increments between 2.3 and 69 nL
- Standard controller
- Optional foot switch available

Benefits

- No syringes required

Applications

- Oocyte injection
- Neo-cortex injections

The **Nanoliter 2010** system is perfect for oocyte injection and applications which use pulled micropipettes for injections in the nanoliter range. It offers fast, accurate injections in 16 preset aliquots. All injection material is contained within a glass pipette, which is typically backfilled with oil.

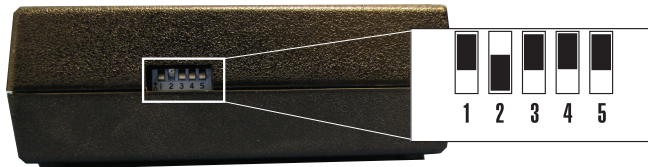
The system Includes:

- (2) vials 3.5" capillaries (100)
- Replacement "O" rings
- (1) Allen wrench
- (1) **MicroFil™ MF34G** backfilling needle
- (2) sample **µTip™** pre-pulled micropipettes

The standard configuration of the Nanoliter 2010 includes the standard controller which is simple to setup and operate.

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By setting the DIP switch on the side of the **Nanoliter2010** controller, the injection volume can be changed from 2.3 to 69.0 nL in 16 steps. Up to 100 injections may be triggered per filling. Since the volume of a normal *Xenopus* oocyte is about 500nL, the instrument has the capability to inject from less than 1% to over 10% of the total volume of the oocyte in one preset step increment.

DIP Switch Settings

Volume(nL)	DIP Switch Settings			
	1	2	3	4
2.3	U	U	U	U
4.6	D	U	U	U
9.2	U	D	U	U
13.8	D	D	U	U
18.4	U	U	D	U
23.0	D	U	D	U
27.6	U	D	D	U
32.2	D	D	D	U
36.8	U	U	U	D
41.4	D	U	U	D
46.0	U	D	U	D
50.6	D	D	U	D
55.2	U	U	D	D
59.8	D	U	D	D
64.4	U	D	D	D
69.0	D	D	D	D

SPECIFICATIONS

INJECTION VOLUME	Variable-discrete aliquot volumes
REMOTE CONTROL	Yes
GLASS OD	1.14mm
GLASS ID	0.5mm
STEP	12.7µm/step
INJECTION SPEED	Slow: 23nL/s Fast: 45nL/s
FILL SPEED	Slow: 23nL/s Fast: 46nL/s
EMPTY SPEED	92nL/s
SMALLEST VOLUME	2.3nL
INJECTIONS PER FILLING, MAX.	100 injections
POWER	100-240VAC, 12V DC 1000mA
Shipping Weight	3 lb. (1.1kg)

ORDERING INFORMATION

NANOLITER2010 Nanoliter 2010 and Standard Controller
System includes Nanoliter 2010 injector, standard controller, 1 vial 3.5 in. capillaries (300), replacement "O" rings, Allen wrench, MicroFil™ MF34G backfilling needle and two sample µTip™ pre-pulled 10 µm micropipettes.

OPTIONAL ACCESSORIES/REPLACEMENT PARTS

504949	Replacement 3.5-in. glass capillaries, 1.14mm OD (300)
504950	Replacement 7-in. glass capillaries, 1.14mm OD (300)
TIP10XV119	Micropipettes (10) prepulled 10 µm
40239	Nanoliter2010 Adapter for SMARTouch™
300521	Replacement O-rings (five)
500778	Replacement Nanoliter Injector Mounting Adapter
500299	Pistons, 5-pack
MF34G-5	MicroFil, 34 g, pack of 5
MICRO2T	SMARTouch controller



WORLD PRECISION INSTRUMENTS

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