

Maelstrom™ 4810



Medium throughput
with great flexibility



Reference video

Introduction






Maelstrom 4810 is a 48 throughput instrument, combined with our patented technology, the entire run can be completed in about 15-60 minutes, depending on the reagent kit.

Maelstrom 4810 can operate 1 to 48 samples, which offers great flexibility to customers.

Specification

ITEM	SPECIFICATION
REF	Maelstrom 4810
Weight (NW)	Approx. 45 kg
Dimensions	58(W) x43(L) x47(H) cm
Power rating	AC 100-AC 240 V 50/60 Hz, 5-2.5 A
Fuse	250 V, 5A
Max. Throughput	48 samples per run
Process. volume	50 µl ~ 1,600 µl
Spin speed	up to 3,000 rpm
Heater	12 independent heating blocks
Magnetic rod	> 3,900 gauss
Display	7-inch touchscreen
UV	UV-C type, 8 W
HEPA	E 10 class

Key features

-  Can process 48 samples per run
-  Patented magnetic beads mixing technology to improve mixing efficiency
-  Reduce the risk of cross-contamination caused by aerosol generation
-  Covid Extraction only needs around 15 minutes
-  High efficiency, simple use and flexible control



Patented Maelstrom Spin Mixing Technology

TANBead Maelstrom product embodies this novel technology and delivers improved performance for applications in molecular diagnostics and life sciences. Maelstrom Series are FDA and CE approved, and the patents are granted in the Canada, China, EU, Korea, Japan, Taiwan, and USA.



Fully Automated

- Simultaneous processing and purification of DNA, RNA samples
- Automation of complicated manual steps



Patented Whirl Stirring Mixing Technology

- Processing volume up to 1,600µl
- Spin tips stir magnetic beads at speeds up to 3000 rpm
- Effective prevention of aerosol cross contamination



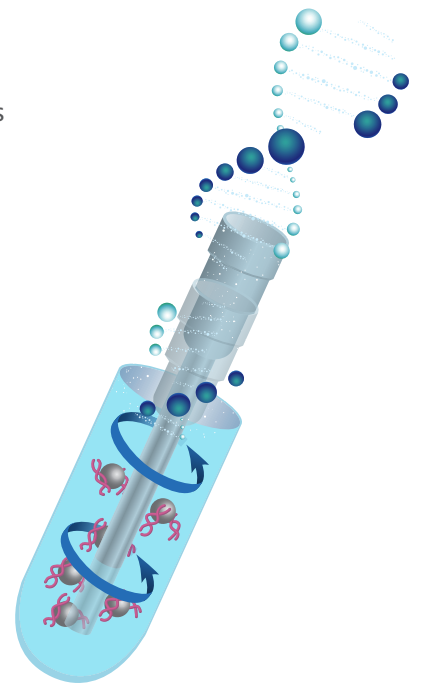
Easy Operation

- Intuitive user interface and easy menu navigation
- User-specified parameter settings



Time Saving

- >3,900 gauss magnetic rods efficiently collect magnetic beads
- High stirring efficiency with variable speeds for considerable time savings

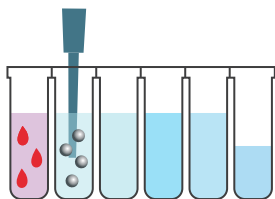


Principle of Nucleic Acid Extraction

● Sample ● Bead ● DNA

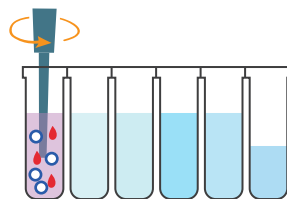
Step 1

Activate beads



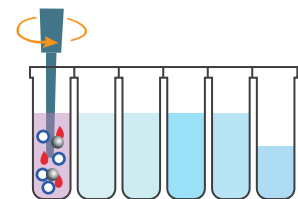
Step 2

Mix sample with Lysis Buffer



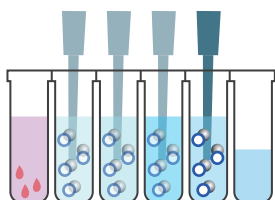
Step 3

Mix sample with beads



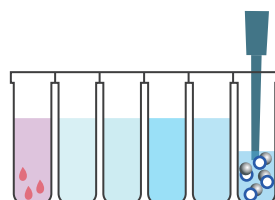
Step 4

Wash bead-DNA from #2 ~ #5 well



Step 5

Elute DNA



Step 6

Release beads

