



Taiwan  
Advanced  
Nanotech

# Maelstrom™ 8 Autostage

**FULLY AUTOMATED  
AND PORTABLE  
NUCLEIC ACID EXTRACTION**

Revolutionizing Magnetic Bead Handling



## 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

- Eliminate human errors , ensure quality consistency
- An open system for a broad range of magnetic bead-based reagent kits



### Patented Whirl Stirring Mixing Technology

- Processing volume up to 1,500 µl
- Spin tips stir magnetic beads at speeds up to 3000 rpm



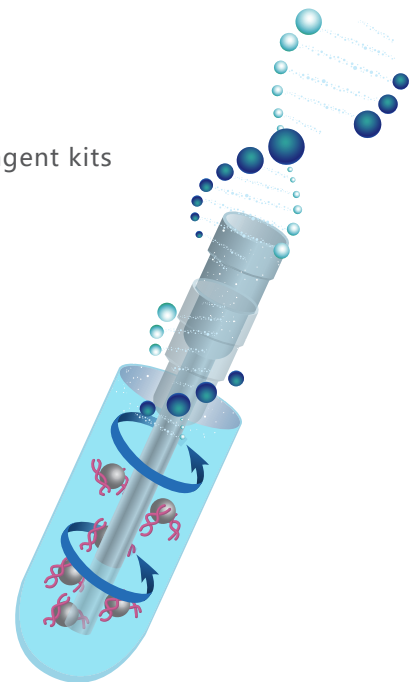
### Easy Operation

- Intuitive user interface and easy menu navigation
- Data exchange via USB connected with laptop
- A portable device that can be used from lab to field



### Time Saving

- 3,000 gauss magnetic rods efficiently collect magnetic beads
- Automation of complicated manual steps



## Operating procedures



◀ Mix



◀ Collect



◀ Pause

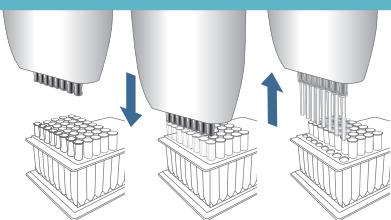


◀ Vapor

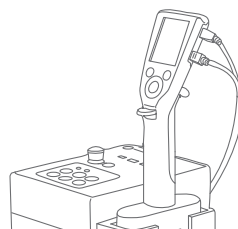


◀ Finish

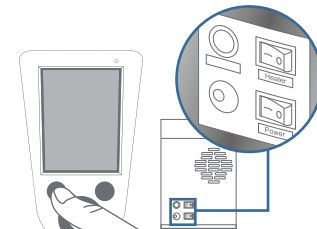
### Mount the "Spin tips"



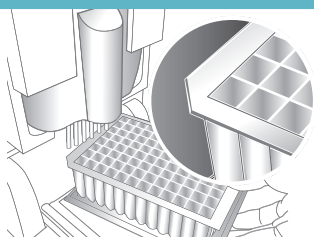
### Connect Maelstrom 8 Handler and Autostage via transmission cable



### Turn on Maelstrom 8 and the Autostage sequentially



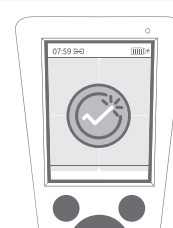
### Place reagent kits on the plate holder properly



### Select "Guide" and the program by pressing "Enter Key"



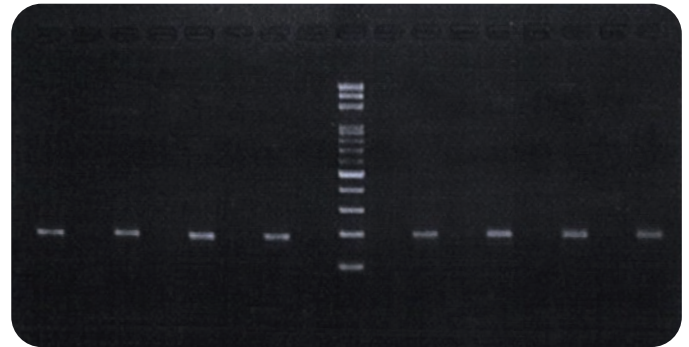
### A "check" mark will be appeared on the screen when program is completed



## Performance

- ✓ The coefficient of variation of nucleic acid extraction concentration is less than 5%
- ✓ High consistency
- ✓ No Cross-contamination to neighbor well  
Experimental results ▶

1 2 3 4 5 6 7 8 M 9 10 11 12 13 14 15 16



## Specification

Model	Maelstrom™ 8
Run Time	25~60 min
Samples per run	8 samples per run
Weight (NW)	600 g
Dimensions (WxDxH)	11.2x6.3x32.7 cm
Power Supply	5 V , 2 A
Battery	3.7 V , 2,850 mAh
Charging Plug	micro-USB
Processing volume	50 µl - 1,500 µl
Magnetic Rod	> 3000 gauss
Spin Speed	up to 3000 rpm
Display	2.4"LCD, 240 x 320pixels

Model	Autostage
Weight (NW)	9.6 kg
Dimensions (WxDxH)	35.7x19x28.5 cm
Power Supply	19 Vac, 120 W
Temp control	1 set
Heating Block	Yes (1 pcs)
Heating	RT~110°C

## Patents

USA	US09616398B2	Korea	10-1696517
EU	EP2937136	China	CN104971638B
Canada	CA2862946	Taiwan	TWI526245B
Japan	JP6151735B2		

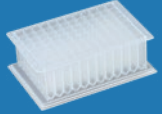
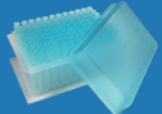
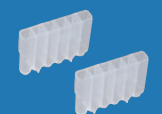
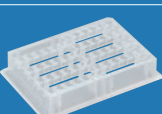

## Reagent kits

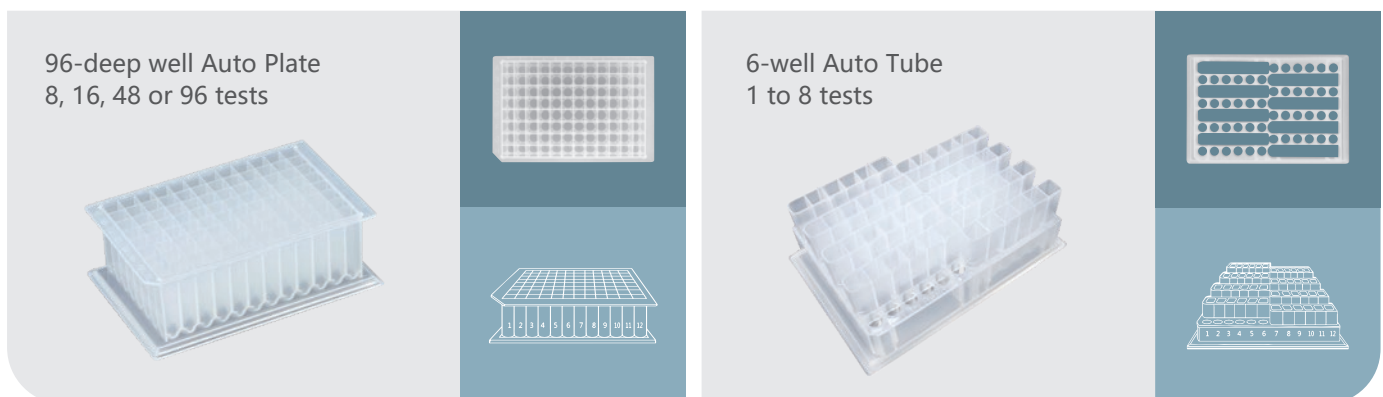
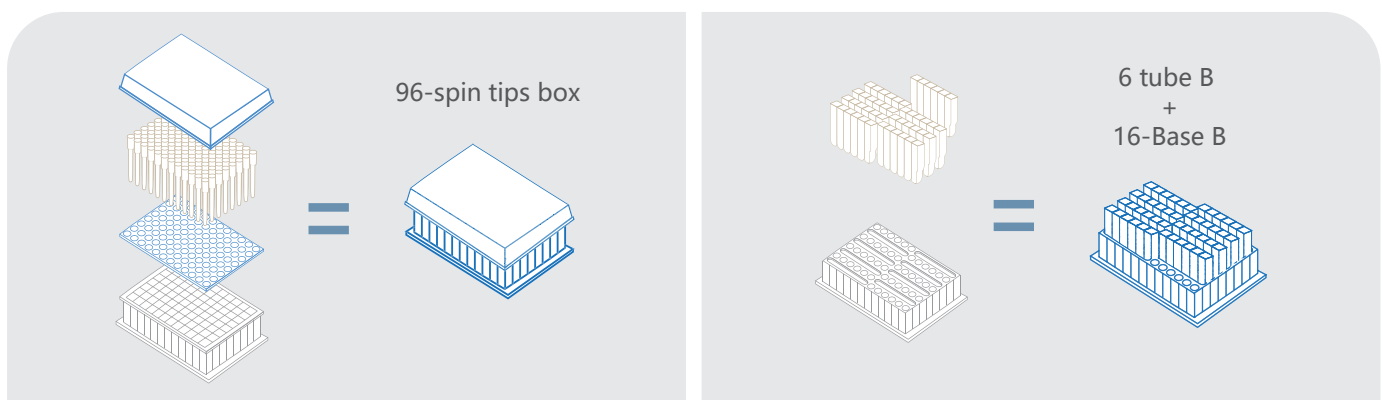
Scan QR code for more reagents ▶



Sample	Description	Test	Reference No.	Ordering No.
Blood	TANBead Blood DNA Auto Plate	96	M611A46	301126
Plant	TANBead Plant DNA Auto Plate	96	M613A46	301134
cfDNA	TANBead OptiPure cfDNA Auto Plate	96	M61CA46	301385
FFPE	TANBead OptiPure FFPE DNA Auto Plate	96	M61PA46	301152
Virus	TANBead OptiPure Viral Auto Plate	96	M665A46	301148
Tissue	TANBead Tissue DNA Auto Plate	96	M612A46	301130
Fungi	TANBead Fungi DNA Auto Plate	96	M61FA46	301150
Forensic	TANBead Forensic DNA Auto Plate	96	M6TFA46	301424
Bacteria	TANBead Gram Bacteria DNA Auto Plate	96	M61GA46	301138
Stool	TANBead Stool Cell DNA Auto Plate	96	M6SCA46	301387

## Consumables

Images	Product Name	Format	Description	Ordering No.
	96 deep well plate	Auto Plate	<ul style="list-style-type: none"> <li>Processing volume 50 µl-1,600 µl</li> <li>Widely use for molecular diagnostics</li> </ul>	083.MWP01.20X
	96-spin tips box	Auto Plate	<ul style="list-style-type: none"> <li>96 pcs of Medium (pen-shape) spin tips in one box</li> </ul>	083.MSP01.20X
	6 tube B	Auto Tube	<ul style="list-style-type: none"> <li>Special Package for single or small number of tests</li> <li>Minimal consumable waste</li> <li>No reagent loss</li> </ul>	104143
	16-Base B	Auto Tube	<ul style="list-style-type: none"> <li>Incorporate with 6 tube B for small number of tests</li> </ul>	104026
	Spin tips	Auto Plate Auto Tube	<ul style="list-style-type: none"> <li>A unique design to maximum mixing efficiency</li> </ul>	056.CSM03.101



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