

Electric Micromanipulator System

QuickPro QP-3

Smoothly reduces hand operations with outstanding operability



- Seamlessly control XYZ in μm units only with a PC mouse.
- Freedom to choose combinations such as right arm, left arm, or both arms.
- An electric system ready for use right next to your microscope.
- Flexible customization for mounting on existing microscopes.
- Automatic recognition for additional unit expansion through plug-and-play.
- Compatible with PC control (available with dedicated camera set.)



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Product Lineup/ Specifications

<<Operating Interface>>

- PC Mouse (XYZ Axis Jogging)
- Touch Panel (XYZ Quantitative Motion), etc.

<<Operating Display Section>>

Microscope magnification input adjustable

- Position Memory Function (3 Points)
- Incremental movement • Origin recall
- Return function • Individual X and Y axes movement • Coordinate status display, zero resettable

<<Power Specifications and Others>>

- AC100-240V Single Phase 50/60Hz
- 350VA Max

<<Standard Stand>>

Magnet Stand
Steel Plate: 100x150mm

<<Electric Manipulator (Right/Left)>>

X-Axis: 20mm, Y-Axis: 20mm,
Z-Axis: 30mm
φ4mm Handle Clamp Compatible

<<Electric XY100mmStage Section>>

X-Axis:Y-Axis: 50mm



SPECIFICATIONS

PRODUCT CONFIGURATION

MODEL NUMBER

Right Arm Set

1 2 3

QP-3RH

Left Arm Set

1 2 4

QP-3LH

Both Arms Set

1 2 x2 units 3 4

QP-3RLH

Both Arms Set
+ Electric XY Stage

1 2 x2 units 3 4 5

QP-3RLH-EXY

Additional Right Arm Set

2 3

QP-3RH-ZS

Additional Left Arm Set

2 4

QP-3LH-ZS

PC-control kit (add-on for
expansion set)

6 7 8

QP-3PCUG

Twin tool arm set

1 2 3 9

QP-3RH-SW

① Touch Panel Screen



② MC104 Controller



③ Electric Manipulator
Unit (Right)



④ Electric Manipulator
Unit (Left)



5. Electric XY Stage Unit



⑥ Mini Tower PC



⑦ LCD Display



⑧ GigE Camera



⑨ Twin Tool Arm



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Control Interface/ Touch Panel Features :

- Operations can be performed using only a PC mouse, allowing for spontaneous and steady movements.
- Operating magnification can be set according to the installed microscope, enabling precise movements in proportion to your hand's motion.
- The control panel is touch-sensitive and compact, ensuring convenient placement.
- Equipped with software capable of controlling various dedicated accessories, providing excellent expandability.

Standard Operation Panel

The selection of connected units, operations via mouse, button controls, and changes in operation magnification can all be spontaneously performed using this panel.

The expansion features include the following.

Mouse-controlled jog operation and precise movement control



Milling Mode - Cutting Area /Depth Control

When used in conjunction with the cutting unit "Milling Pro", it enables semi-automatic cutting. You can freely adjust the cutting area and depth, making it effective for exposing embedded substances and excavation.

Ultrasonic Cutting Unit
Milling Pro: MIL-1



Micro Tweezers Open/Close Control

Remote-controlled Electric Micro Tweezers enable precise open/close movements and save positions for repetitive gripping tasks.

Electric Micro Tweezers
Model: MTW-2E



High-Precision Rotator - Rotation Control

In FIB processing and lifting thin sections, you have precise control over sample orientation. It includes a memory function for rotating the sample to a specific angle.

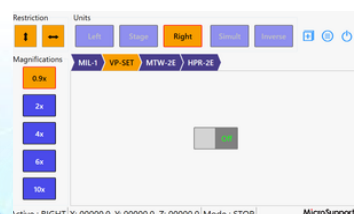
Electric High-Precision
Rotator Model: HPR-2E



Vacuum Absorption Tool Set with ON/OFF Control

An electromagnetic valve is installed along the suction line, allowing ON/OFF control through the software. This feature is exclusive to the VP-SET4.

Vacuum Absorption Tool Set
Model: VP-SET4

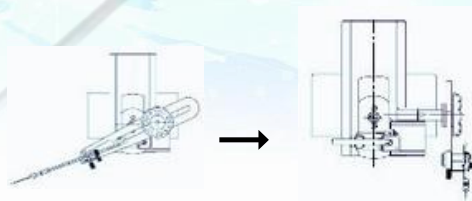


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Other Custom Control Examples

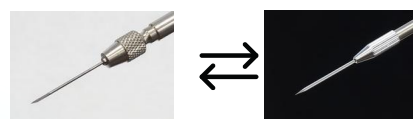
Arm Rotation Control

- This mechanism allows the arm to rotate 90 degrees from its standard position through remote control.
- It is used for transferring samples collected under the microscope to areas outside the microscope stage.



Silkworm Egg Injection Application

- The position memory function allows for instant replacement and positioning of the tungsten needle and injection pipette.
- Adjustment of the Z-axis can be performed to accommodate the size of silkworm eggs.



Micro-tools and Accessories Main Lineup



- Tungsten probe (*pick-up*)
- Tungsten carbide probe (*cutting/milling*)
- SUS knife (*film cutting*)
- Ruby knife (*incision/head extraction*)
- Micro-pipette (*solid/liquid absorption*)

- 6. MillingPro (*embedded substance cutting*)
- 7. Vacuum Absorption Tool Set (*solid absorption*)
- 8. Extra control vacuum absorption tool set (*software-controlled solid absorption*)
- 9. Micro-tweezers (*grasping sample*)
- 10. Electric Micro-tweezers (*electrical sample grasping*)

- 11. High Precision Rotator (*posture control*)
- 12. Electric High Precision Rotator (*electrical posture control*)
- 13. Micro-scissors (*single-fiber cutting*)
- 14. Micro-injector (*liquid absorption/release*)
- 15. Electrode Holder (*electrical measurement*)

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*Specifications subject to change without notice

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