

## **Universal Motorised Stage**

### XY stage - accepts all microscopes



Mounting equipment

www.scientifica.uk.com

## A smooth solution for mounting any microscope

Rapid, precise adjustment ensures that Scientifica's Universal Motorised Stage (UMS) is a valuable tool for electrophysiology research. It offers fast, accurate and intuitive, remote control, removing the effort, and potential for sample damage.

The UMS' capability of accepting Scientifica's, or other, leading microscopes provides complete versatility.



50 mm movement in X & Y (and optional Z-focus)

The UMS provides 50 mm of smooth and When combining the slim profile, fullyaccurate translation in X and Y. Controlled via any of Scientifica's control devices or LinLab software. An optional Z- axis focus module is also available to replace any manual focus intervention.

Benefitting from recallable memory positions the UMS is versatile enough to carry out demanding microscopy, electrophysiology and imaging applications.

#### Compatible with: Olympus, Nikon, Zeiss & Leica

The UMS is compatible with the majority of Olympus, Nikon, Zeiss and Leica fixed stage, upriant and inverted microscopes,

It therefore, has the capacity to carry the significant weight often associated with inverted microscopes.

Scientifica are able to provide custom-made solutions for specific requirements. Speak to a product specialist to discuss any unique. This overcomes the common problem of needs.



#### SliceScope - Scientifica's stable partnership

motorised SliceScope, with the UMS, customers create a stable and smooth foundation for electrophysiology research. The slim footprint allows for easy placement of multiple devices around the sample.

Researchers typically combine the UMS with Scientifica's micromanipulators, SliceScope microscope and a choice of either fixed Post and Platforms, or SlicePlatform (pictured riaht).

#### Free LinLab control software

This free, software allows users to set speed, direction of movement, step sizes and memory positions.

The unique 'Follow Function' within LinLab is an excellent example of how motorised devices can be integrated together allowing the user to virtually link manipulators and stages to keep pipettes in the field of view, whilst searching for areas of interest.

searching a large sample for an area of interest then having to bring pipettes into the field of view.

### Scientifica

SliceScope Pro 2000 package featuring: the SlicePlatform, UMS, PatchStar Micromanipulators and the Scientifica SliceScope



# Predictable movement with easy-to-use control devices

Scientifica uses superior, crossed roller bearings providing extremely smooth and repeatable movement, even with the heaviest microscopes A drift-free design ensure that once a desired position has been reached, the stage will remain stable (less than 1 µm drift in 2 hours).



### **Control Cube**

The Control Cube is a compact, wheeled design, with fingertip control. Each of the wheels corresponds to an axis of movement and can be converted between left and right-handed operation.

An array of buttons and switches gives fast access to a variety of functions; activating the "approach axis", adjusting speed, setting and recalling memory positions and more.

### PatchPad

With this flat panel design, each axis of movement can be allocated a wheel on the panel, adding flexibility to suit user-requirements. It includes the same easy access buttons and switches as the Control Cube.

A touchscreen variant is also available, increasing the number of devices that can be controlled from the two that the standard PatchPad can switch between.

### **Joystick**

An alternative is the Scientifica Joystick with its ergonomic design that offers intuitive directional control in all three axes. With movement speed proportional to the amount of deflection applied, a speed change button enables the user to customise the device to their preference.

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### **Complete setups**

Scientifica offer a range of SliceScope Pro, and PatchPro systems, which provide cost-effective options for mounting samples and manipulators - built around the stable and reliable UMS.



### Upright systems

These systems have been developed to be modular, flexible and easy-to-use. Allowing users to control microscope, manipulators and mounting platforms - all from two simple, user consoles.

SliceScope Pro packages (1000 and 2000) provide a very stable, compact system, with the UMS providing a solid foundation for use in conjunction with the fully-motorised, SliceScope.

PatchPro systems neatly integrate Scientifica's manipulators and stages with a range of **Olympus, Nikon, Zeiss & Leica** microscopes.

### **Inverted systems**

The PatchPro 4000 system is also available to provide the same reliable translation of inverted microscopes.



PatchPro 4000



### **Specifications & schematic**

Specifications	
Number of axes	2 (with optional Z axis available)
X & Y Travel	50 mm
Step size	20 nm
Speed (minimum)	0.1 $\mu$ m per second
(maximum)	4 mm per second
Mechanical resolution	<1 µm
Surface material	Anodised aluminium
Weight	15.3 kg



### Warranty

Scientifica's success is founded on supplying superior support and application of our significant manufacturing experience. We would therefore really value the opportunity to understand your applications better and to offer no obligation advice on equipment, configurations and compatibility.

All Scientifica instruments are sold with a two-year warranty giving you complete peace of mind. This covers all defects in manufacturing and materials. In this unlikely event, Scientifica will remedy either by repair or replacement.

Our team of customer support engineers is dedicated to providing you with the very best advice and support, should you experience any difficulties with our products. With all products we offer a complete installation support service.

### Scientifica

### Scientifica's mounting range

#### Movable microscope



Universal Motorised Stage

One of the following platform systems



SlicePlatform



Manual XY Stage

The Post & Platform, SlicePlatform and Inverted SlicePlatform are combined with our Universal Motorised Stage (UMS) for smooth microscope movement. Post & Platform



#### **Fixed microscope**

Movable Top Plate



Movable Top Plate Motorised Movable Top Plate

#### Motorised Movable Base Plate





Inverted Movable Top Plate

Inverted Motorised Movable Top Plate

#### Complete systems

All of the mounting options above are available as a package with Manipulators and a Microscope (either SliceScope or most major upright and inverted Microscopes) - a complete turnkey solution for your research.

# **P**Scientifica

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Find out more about the Scientifica range of products and interviews on our channel, including a full demonstration of our SlicePlatform and Post & Platform mounting systems.

www.youtube.com/scientificauk

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