

## Inverted Fixed Platform

Stable with easily adjustable legs



## Inverted Fixed Platform *for inverted microscopes*

Is a stable surface for manipulators and electrophysiology samples. Adjustable height legs allow compatibility with all leading inverted microscopes including: Olympus, Leica, Nikon and Zeiss.



Inverted Fixed Stage with a Nikon Ti-U Eclipse Microscope

### Universal compatibility

Central to the platform's success has been its wide compatibility with inverted microscopes from all major manufacturers, including Olympus, Zeiss, Nikon and Leica.

This ensures simple integration with your current microscope and, once purchased, can be moved to other workstations should your experimental requirements change. This compatibility is due to its ergonomically designed shape and dimensions, and the height-adjustable legs of between 382 mm to 517 mm.

### Simple setup and operation

The Inverted Fixed Platform provides a refreshingly simple solution for complex electrophysiology and imaging studies.

With stress-free compatibility with micromanipulators, perfusion equipment and anti-vibration tables, the Inverted Fixed Platform's unique sliding carriage design combined with seven grooves will ensure accurate and fast placement of equipment, relative to the microscope.

### Reliable stability

With stability such a priority for patch clamp applications and long-term imaging, the Inverted Fixed Platform's solid construction ensures that minimal vibrations or movement are transmitted when securely attached to an anti-vibration table.

The sturdy legs and completely rigid anodised aluminium top plate provide the maximum stability for your manipulators and sample.

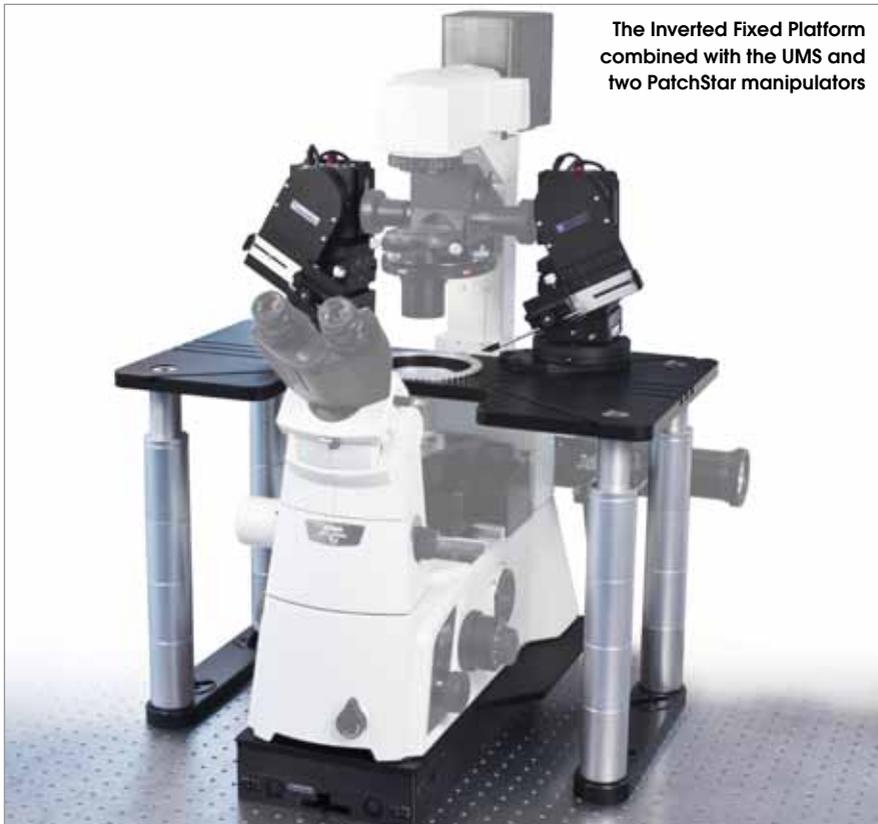
## Universal Motorised Stage: *A strong partnership*

Unlocking potential for investigation across larger samples, the Scientifica Inverted Fixed Platform is ideally suited for partnering with the Universal Motorised Stage (UMS).

The UMS offers 50 mm of intuitive, remotely controlled translation of your entire microscope in X and Y axes. An optional Z axis focus module is available for some microscope models.

Featuring unlimited recallable memory positions and user customisation via LinLab software, the UMS is widely compatible with microscopes from all major manufacturers.

The UMS is also compatible with upright microscopes, for which Scientifica can supply an alternative fixed platform. A manual version of the UMS is also available, featuring adjustment via micrometers.

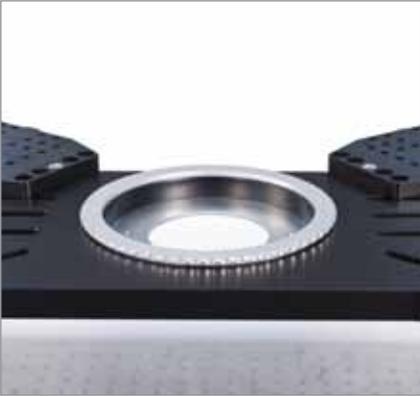


**The Inverted Fixed Platform  
combined with the UMS and  
two PatchStar manipulators**

## Benefits

### Inverted Fixed Platform

As a central component in your electrophysiology setup, a good mounting system will ensure complete stability during recordings and prove intuitive and “problem-free” in operation.



#### Efficient sample space

To simplify your setup, the Inverted Fixed Platform features a sample chamber integrated into the top plate and is supplied with a ferro-magnetic outer ring for easy placement of perfusion equipment. The SlicePlatform also accepts standard 108 mm and 110 mm chamber adaptors.

The inverted platform features a deep sample chamber suitable for techniques using cultured or dissociated cells, with a chamber locking mechanism keeping your sample plate secure.



#### Flexible mounting

The Inverted Fixed Platform's tracks accept lockable sliding carriages, usually used for mounting micromanipulators.

This unique mounting system offers unrestricted freedom of movement to precisely position and fix your manipulators as close to your sample as you need. This means that you can make the most of your manipulator's travel range by starting in an ideal 'home' position.

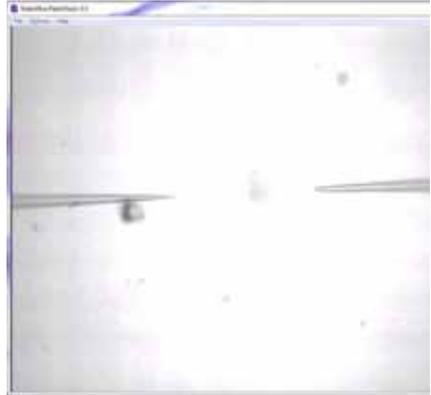


### Anti-vibration table freedom

To allow complete freedom to arrange your rig on your anti-vibration table, the Inverted Fixed Platform features Scientifica's clever rotatable slotted inserts on its feet.

The slotted inserts accept metric or english bolts making them universally compatible with tapped anti-vibration tables.

The legs of the Inverted Fixed Platform can be adjusted and locked, to give a stable working height of between 382 mm and 517 mm. This allows perfect compatibility with the focal height of your inverted microscope.



### Unique "Follow Function"

When used in combination with the Scientifica Universal Motorised Stage (UMS) and motorised manipulators, the "Follow Function" in the LinLab software can greatly simplify patch clamp studies using the Inverted Fixed Platform.

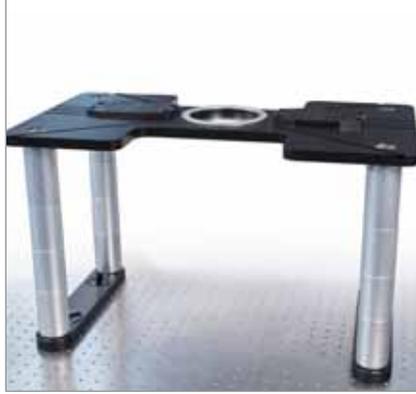
This feature enables the user to virtually 'link' multiple manipulators to the X & Y movement of the Scientifica UMS. When using the microscope stage to translate around your sample, the manipulators will automatically stay in your field of view. In combination with a motorised Z-focus module available for most inverted models, the "Follow Function" can also link manipulator Z-axis movement with your microscope's focus.

Individual manipulators can then be 'released' at specified interest areas, while other manipulators continue to move in tandem with the UMS. This prevents extended searching for manipulators outside the field of view.

## Complete setups

### PatchPro 4000

The 4000 systems cost-effectively integrate the Inverted Fixed Platform into complete patch clamping solutions, including micromanipulators, a translation stage and control hardware.



#### Patch Pro 4000

The PatchPro 4000 system combines the Inverted Fixed Platform into a complete patch clamping solution, compatible with microscopes from all major manufacturers.

Far more convenient than other inverted electrophysiology systems, the PatchPro 4000 incorporates the Inverted Fixed Platform with Scientifica's Universal Motorised Stage and PatchStar or MicroStar micromanipulators.

---

#### Advantages

Completely integrated system with multiplexed control hardware and software

Free from compatibility issues arising from combining products from multiple manufacturers

Ultra low-noise electronics throughout for "trouble-free" recordings

---





## Inverted Fixed Platform

### Specifications

Chamber adaptors accepted:	108 mm and 110 mm
Surface material:	Anodised aluminium (Black)
Leg material:	Anodised aluminium (Silver)
Weight:	11 Kg
Minimum/Maximum Surface Height:	382 mm - 517 mm

### Ordering Information

Inverted Fixed Platform (Metric Carriages)
Inverted Fixed Platform (English Carriages)

### Order number

ISP-2600-00
ISP-2600-50

All Inverted Platforms include the following as standard: 2 manipulator mounting carriages, Slice Recording Chamber kit (Slice Recording Chamber, magnetic mounting ring and 2 perfusion tools), sample plate holder and locking system.

## Universal Motorised Stage

### Specifications

Number of Axes:	2
X & Y Travel:	50 mm
Electronic resolution:	20 nm
Speed (minimum):	0.1 $\mu\text{m}$ per second
(maximum):	4 mm per second
Mechanical Resolution:	<1 $\mu\text{m}$
Surface Material:	Anodised Aluminium
Weight:	15.3 kg

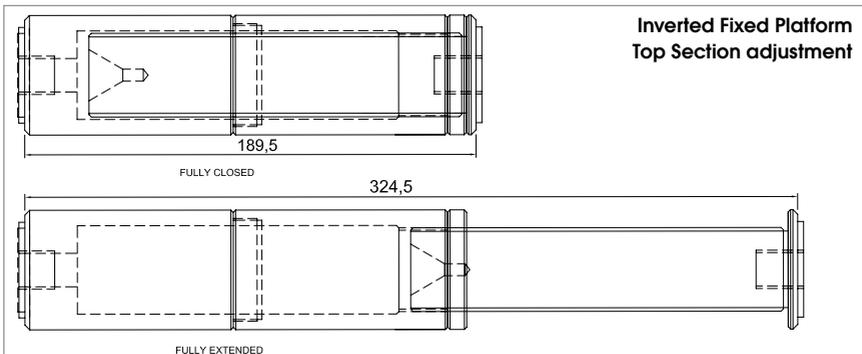
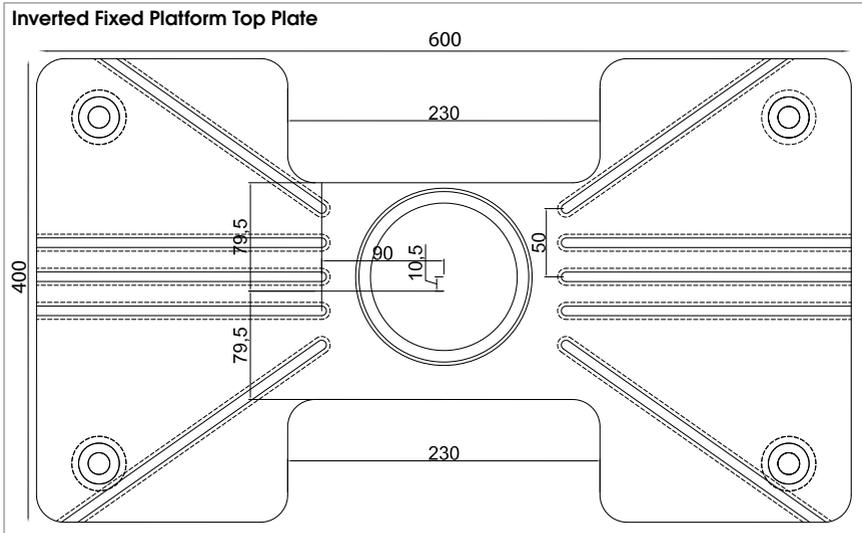
### Ordering Information

Motorised XY Stage
Motorised XY Stage with Z focus module
Manual XY Stage

### Order number

UMS-2500
UMS-2550
MS-2100

## Schematics (mm)



Please speak to a member of our product specialist team if you need assistance in selecting the most appropriate equipment for your requirements.

## 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.



# A guide to Scientifica mounting range

## Movable Microscope



Universal Motorised Stage

OR



Manual XY Stage

+

One of the following platform systems



SlicePlatform



Post & Platform



Inverted Fixed Platform

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

## Fixed Microscope

### Movable Top Plate



Movable Top Plate    Motorised Movable Top Plate

### Motorised Movable Base Plate



### Inverted Movable Top 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.



Revision 1.1

Tel: +44(0)1825 749933  
Fax: +44(0)1825 749934  
Email: [info@scientificauk.com](mailto:info@scientificauk.com)  
Web: [www.scientificauk.com](http://www.scientificauk.com)

SCIENTIFICA LTD  
Kingfisher Court  
Brambleside  
Bellbrook Industrial Estate  
Uckfield  
East Sussex  
TN22 1QQ  
UK

Find out more about the Scientifica range of products and interviews on our channel, including a full demonstration of our Inverted Platforms.

[www.youtube.com/scientificauk](http://www.youtube.com/scientificauk)

Scan Me!



THE QUEEN'S AWARDS  
FOR ENTERPRISE:  
INTERNATIONAL TRADE  
2012