

# GIBRALTAR®

LIFE SCIENCES

Burleigh Gibraltar®  
Platform and Motorized X-Y Stage



## THE MOST DEPENDABLE MOUNTING SOLUTION FOR FIXED-STAGE, UPRIGHT MICROSCOPES

- Motorized, hands-free movement eliminates vibrations and optimizes performance
- Memory positions allow easy, dependable movement between different fields of view
- Sturdy, open design for unrestricted instrument operation
- Choice of platform tops to fit your specific application needs
- 2-year warranty
- The Gibraltar® Platform is compatible with Zeiss, Olympus, Nikon and Leica upright microscopes
- Ideal for:
  - Multiple-patch experiments
  - Time-lapse photography of different areas
  - Photolysis and patch-clamp recording of areas not in the same field of view

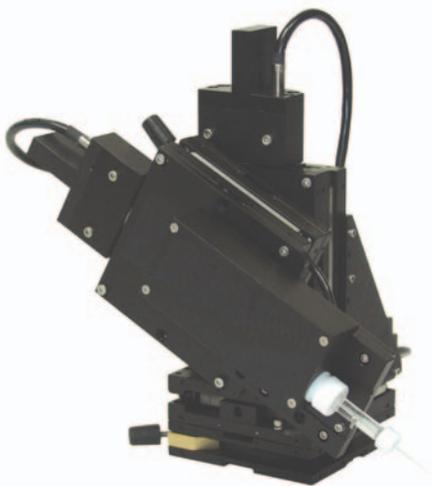
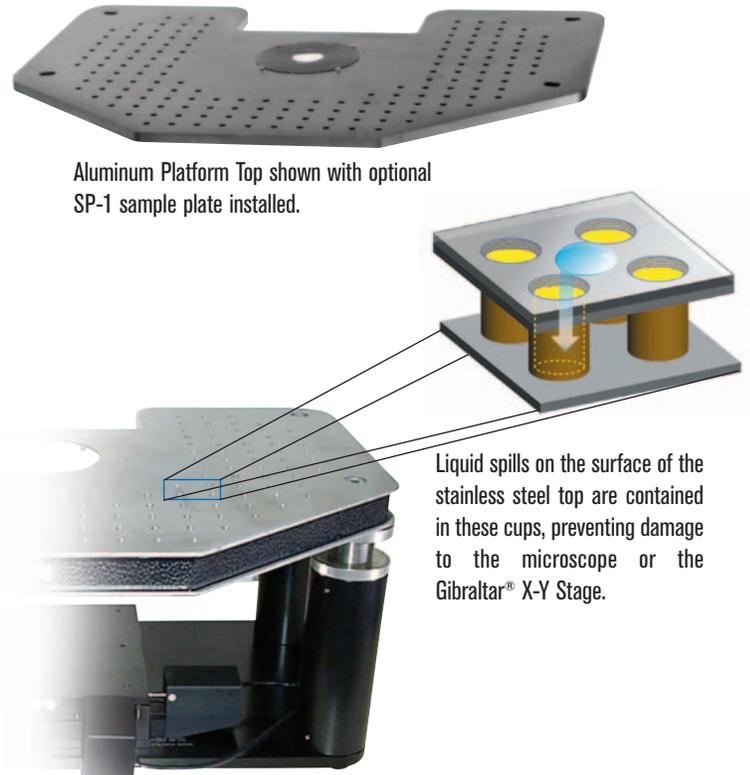
# Gibraltar® Platform and Motorized X-Y Stage

## DESIGNED WITH YOUR PRODUCTIVITY IN MIND

The Gibraltar® Platform and X-Y stage provide a complete solution for fixed-stage upright microscopes, and integrates our newest generation of piezoelectric micromanipulators, the PCS-6000. The Gibraltar® Platform allows the microscope to be smoothly and precisely moved between fields of view without disturbing an established patch. The open design of the elevated platform allows manipulators, chambers and other instruments to be installed with optimum mechanical and thermal stability.

The motorized X-Y stage with memory positions ensures that you never lose a position of interest. Gone are the days when moving out of the field of view is plagued by the doubt that you may not be able to move back to your current location. Two memory positions allow you to move back and forth without worry between different locations not in the same field of view.

The Gibraltar® Platform is available in two versions for maximum functionality: a spill-proof stainless steel top with tapped holes or a non-magnetic epoxy-coated aluminum top with through holes.



PCS-6000 Micromanipulator

## DUAL-PATCHING WITH CONFIDENCE

It's no secret that an essential prerequisite for successful patching is stability so that the first patch is not disturbed when a second patch is performed. The motorized, hands-free Gibraltar® Platform and PCS-6000 series manipulators remove the possibility of mechanical vibration derived from touching the manipulators or microscope X-Y translation stages. The PCS-6000 combines motorized coarse positioning with piezo ultra fine control, thus the best of both are combined into one manipulator.

## SIMPLIFIES EXPERIMENTAL SET-UP

Previously difficult experimental set-ups are greatly simplified with the Gibraltar® Platform and Motorized X-Y Stage.

- You can confidently patch in different fields of view without worrying that you'll lose your way or have to delay the experiment by reducing the magnification to locate the areas of interest.
- When you've found a suitable area of the sample to experiment on, simply push a button to memorize the location and proceed with the search for a more desirable area. Memorize the second location and look for a third. With the first two positions in memory you can return to them at will for comparison.
- If you're doing time-lapse imaging, you can double your productivity and produce twice the data on samples of the same age by moving between two locations.
- For photolysis of caged compounds, select the area to be activated, store it in memory, move to the appropriate area to perform the patch, store that position in memory, then move back to the original location and perform the photolysis.



Gibraltar® Platform and Motorized X-Y Stage

## IT'S ALL ABOUT CHOICE

We offer a wide range of upgrades and accessories for micromanipulation, providing maximum flexibility and easy customization.

- With or without base? The Gibraltar® Platform can be purchased already attached to a sturdy base or without a base for mounting directly to a vibration isolation table.
- Aluminum or stainless steel top? Choose a non-magnetic, epoxy-coated aluminum top with through holes or a magnetic, stainless steel breadboard top with tapped holes. In both instances there are more than 160 holes in a one-inch grid providing more than 270 degrees of mounting flexibility.
- Motorized stages or manual micrometers? Manual micrometers are an alternative to the motorized X and Y stages with memory positions. Purchase the entry-level manual model now and upgrade to the motorized model as your needs expand.



Manual Gibraltar® Platform and Stage

### Already own a Gibraltar® Platform and want to upgrade?

Converting from manual micrometers to motors and memory is quick and easy with our upgrade kit. Installation takes less than 15 minutes and does not require dismantling your current set-up. Ask your local representative for details.

## SPECIFICATIONS

### GIBRALTAR® PLATFORM TOP

Material	Black epoxy-coated aluminum	Magnetic stainless steel
Dimensions	23.6" x 17" x .5"	23.6" x 17" x 1.25"
Weight	16 lbs.	25 lbs.

### COLUMNS

Material	Black epoxy-coated aluminum and stainless steel
Threads	1.5" diameter, 12 threads per inch
Weight	6 lbs. each (four per system)

### X-Y STAGE AND ADAPTER PLATE

Load capacity	110 lbs.
Material	Black plated aluminum
Bearings	Ball bearings
Size	8" x 8" x 2"
Weight	18 pounds (with microscope adapter plate)

### Motors

Range	1" (25 mm) in both X and Y directions
Speed	Maximum: 0.4 mm /sec, minimum: 3.0 micron/sec
Position resolution	~ 5 micrometers at slow speed

### ELECTRICAL/ENVIRONMENTAL

Power requirements	90 to 260 VAC, 50/60 Hz, 45 W max
Dimensions	10" x 10" x 4" for controller 4" x 4" x 5" for joystick
Mass	4.5 lb. for controller and joystick
Environment	Operating: 10 to 40°C, < 60% RH Storage: -10 to 70°C, < 90% RH non-condensing

### BASE PLATE (OPTIONAL)

Material	Black epoxy-coated aluminum
Dimensions	23.6" x 11.6" (for upright)
Weight	14 lbs.

### SAMPLE PLATE (OPTIONAL)

Material	Black plated aluminum
Dimensions	110 mm OD, 32 mm ID, 3.2 mm thick

### COMPATIBLE VIBRATION-ISOLATION TABLES (WHEN BASE IS NOT PURCHASED)

English tables	1/4-20 tapped holes on a 1-inch square pattern
Metric tables	M6 x 1.0 tapped holes on a 25-mm square pattern

## ORDERING INFORMATION

There are 40 primary configurations for the Gibraltar® Platform, based on combinations of microscope type, base plates, platform tops and motors/manual. Use the following to order exactly the Gibraltar configuration you need.

**GBRLTR** --

#### Microscope type

**LFS:** Leica DM LFS  
**EFN:** Nikon E600FN  
**BX:** Olympus BX50WI, BX51WI  
**FS:** Zeiss Axioskop-FS  
**2FS:** Zeiss Axioskop-2FS

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#### Base plate

**1:** Stage with base  
**2:** Stage without base

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#### Platform top

**SS:** Stainless steel  
**AL:** Aluminum

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#### Motors/Manual

**MTR:** Motorized  
**MNL:** Manual

To discuss how the Gibraltar® Platform and X-Y stage can improve your research, talk to the experts at EXFO.

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