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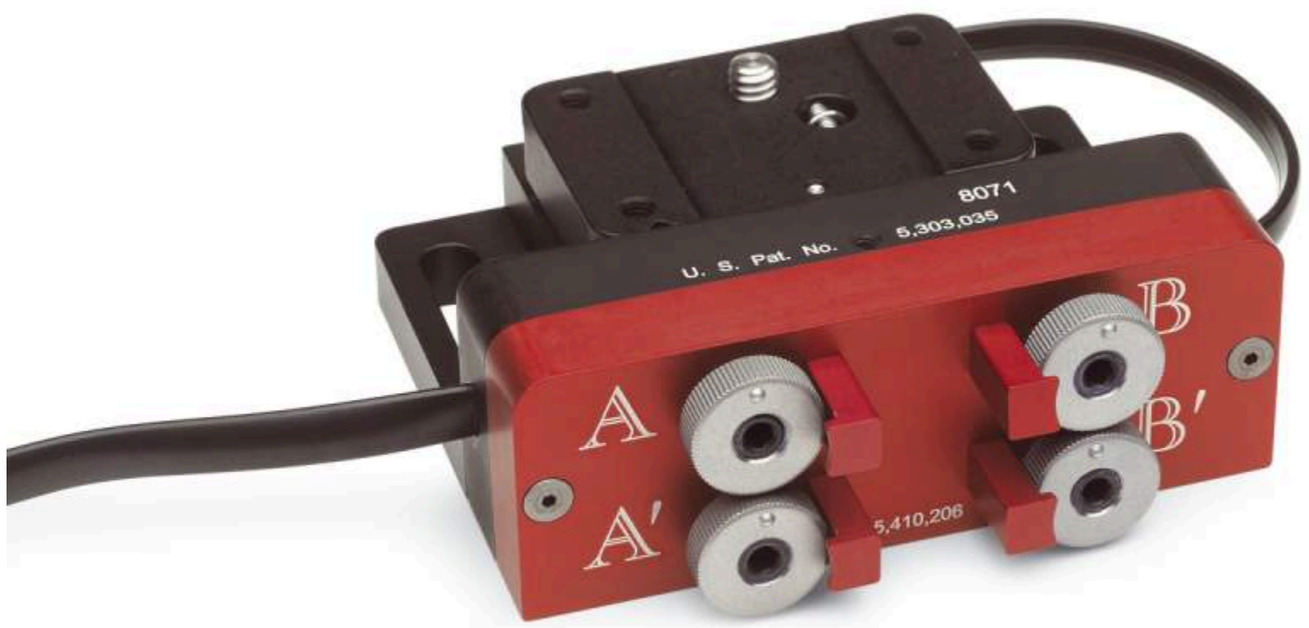
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Motorized XYθxθy Tilt Aligner, 3 mm, 8°, 8/32



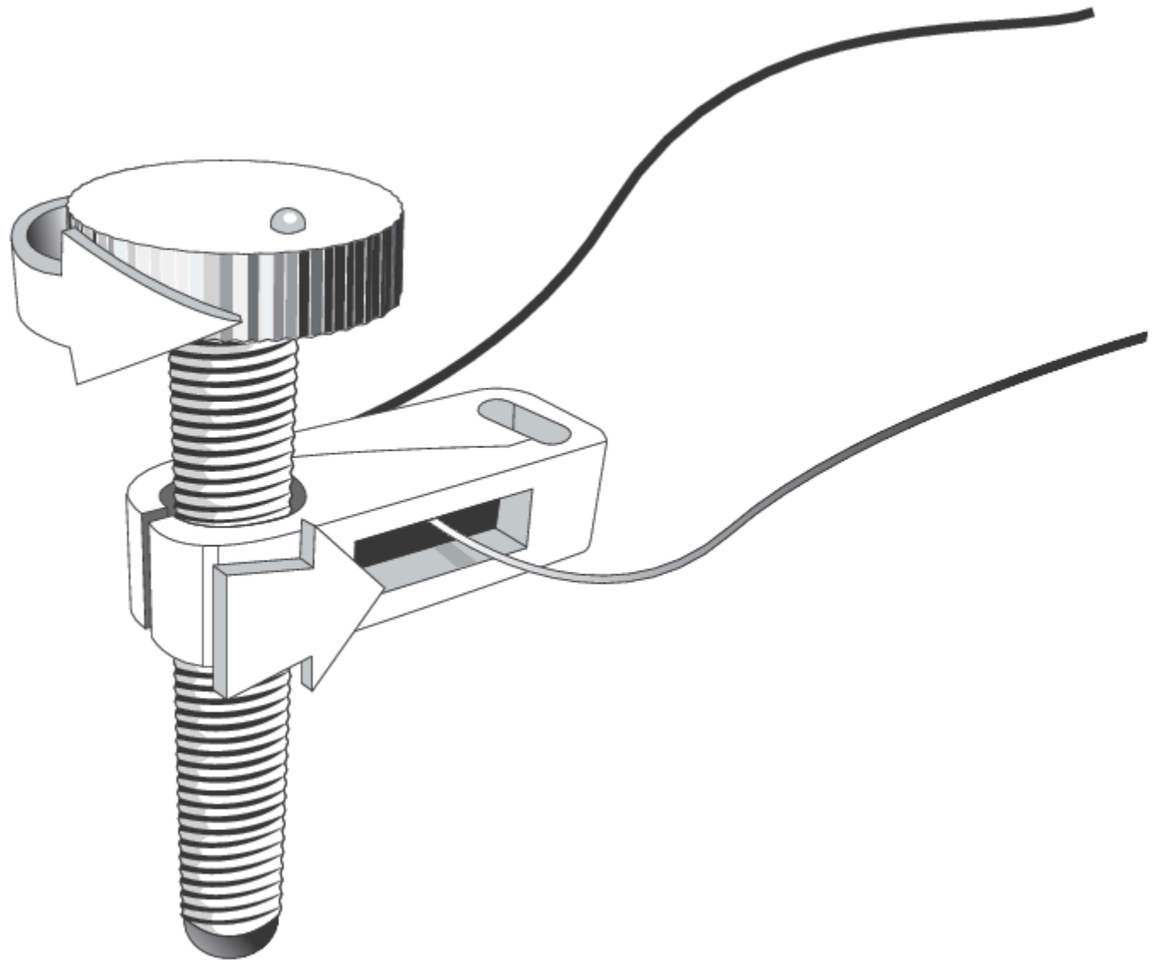
The 8071 XYθxθy Motorized Four-Axis Tilt Aligner increases the utility of our popular kinematic stages by motorizing each of the axes. The addition of Picomotor™ actuators to each stage allows remote high-resolution (<30 nm) adjustment of various combinations of X, Y, θx, and θy. The Model 8071 four-axis aligner is ideal for positioning modulators or isolators and for coupling light into waveguide devices. 8-32 tapped holes. Use with two 8725 multi axis adapters and one 8742 controller/driver or one 8742-4-KIT to control all 4 axes (sold separately).

Four-Axis Tilt Aligner



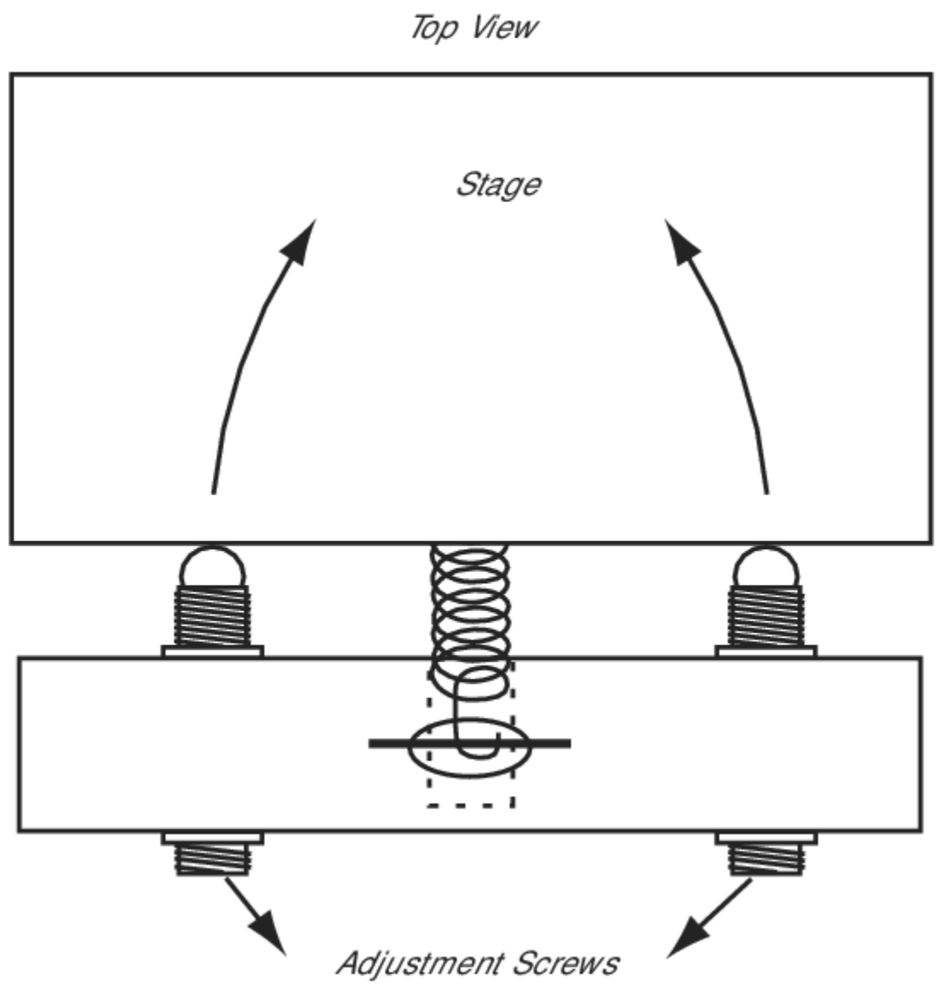
The Model 8071 Four-Axis Tilt Aligner offers XYΘxΘy Picomotor adjustment and allows intuitive alignment of optical tubes or paths with an input and an output such as electro-optic or acousto-optic modulators or lenses. All motions are independent and connected to a single base, so you won’t induce coupled motion while making adjustments. This XYΘxΘy Picomotor Aligner is ideal for positioning modulators or isolators and for coupling light into waveguide devices. It is offered with English or metric tapped holes.

Picomotor Technology



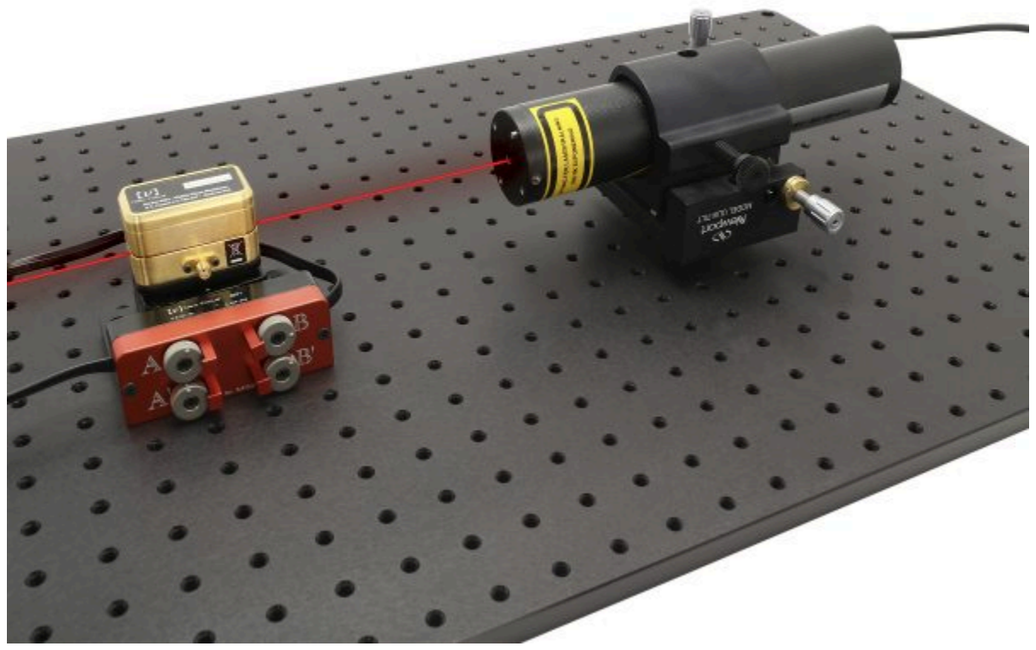
These multi-axis kinematic alignment stages are equipped with Picomotor actuators which are ideal devices for fine-positioning and long-term stability. The Picomotor actuators have a less than 30 nm resolution with minimal backlash and maintain their position with no power applied. These features make the Picomotor actuators unique among motion-control devices and an ideal choice for typical set-and-hold applications.

Multi-axis Optic Positioning in a Compact Unit



Kinematic Device Alignment Stages combine the capabilities of multiple, stacked translation stages into a single stage with multiple actuators. These stages are designed to align a device or optic, such as an acousto-optic modulator, to a beam path, avoiding the added wobble of combining components for multi-axis positioning. These stages have all degrees of freedom needed to align one optical axis to another. The five-axis stages provide additional control of the focus and the six-axis stage provides roll. Each degree of freedom has one actuator for motion, such that two actuators provide translation when moved equal amounts, while one actuator's motion provides the tilt about the bisecting axis. Rotations of the mounting plate around its center, then, arise from turning two actuator screws in opposite directions.

Move Your Optic or Isolator Instead of Beam

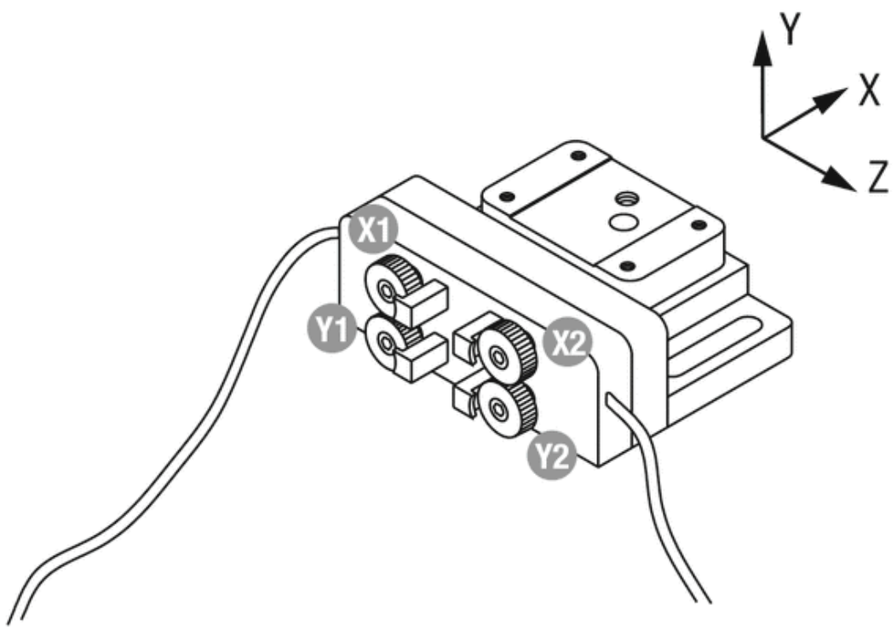


Our multi-axis stages are designed for applications where precise positioning and high stability are required. Shown here is a typical application of aligning an optical modulator to a laser beam with our four-axis device alignment stage.

SHOW LESS

Specifications

Axes of Travel	X, Y, θx, θy	**Minimum Incremental Motion**	<30 nm
Mechanism	Kinematic	**Angular Resolution**	θ_x, θ_y≤0.7 µrad
Drive Type	Picomotor	**Connector Type**	6-pin Connectors (2)
Travel Range	3 mm	**Operating Temperature**	10 to 40°C
Angular Range	8°	**Thread Type**	8-32
Load Capacity	13 N		



Resources & Downloads

Related Products

Similar

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	**9071** Device Alignment Stage, Four-Axis, 3 mm Linear, 8° Angular, 8-32 & 1/4-20		In Stock	$496

Compatible

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	**8742-4-KIT** Picomotor Controller Kit, Four-Axis		In Stock	$1,395
	**8742-8-KIT** Picomotor Controller Kit, Eight-Axis		In Stock	$2,672

Compare	Description	Drawings, CAD & Specs	Avail.	Price
	**8725** Multi-Axis Adapter, Picomotor, 6 pin to 3x 4 pin		In Stock	$119

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