

## Optics

Lenses &  
Microscope  
Components

Coatings

Mirrors &  
Beamsplitters

Prisms &  
Polarizers

Filters

Pinholes

## Opto- mechanics

Rails

Mounting  
Hardware

Mirror &  
Component  
Mounts

Manual  
Micro  
Positioners

Motorized  
Positioners

## Optical Instruments

Microscopes

Light  
Sources

# Opto-mechanics

Ealing offers a wide range of precise opto-mechanical components and systems designed specifically with laser and photonics applications in mind. Our precision machine shops have many years of experience in the design and fabrication of optical mounting systems. Our applications engineers are ready to discuss your requirements and recommend the most suitable component to meet your application.

If you would like to use Ealing's opto-mechanical components in volume manufacturing situations, we will be pleased to provide you with a special quotation. We can build to meet your specific custom or OEM requirements.

Regardless of what your opto-mechanical requirements are, give us a call. The items in this catalog are held in stock, ready for immediate delivery.



# Opto-Mechanics

<b><i>Rails</i></b>	<b>108</b>
<b><i>Mounting Hardware</i></b>	<b>112</b>
<b><i>Mirror &amp; Component Mounts</i></b>	<b>116</b>
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# TriRail™ – Triangular Optical Rails

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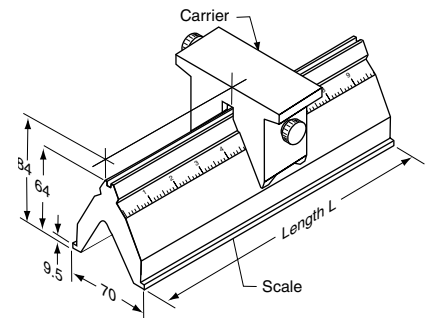
Pinholes

- **Triangular Profile**
- **Free standing optical rail**
- **Lightweight Aluminum**
- **Positioning scale in millimeters**
- **Lengths up to 2 m**



Ealing TriRails™ are available in lightweight, low cost Aluminum extruded from a hard aluminum alloy. They are based on the widely used triangular bench profile originally offered by Ealing Electro-Optics.

These lightweight Aluminum rails are ideal for educational and general laboratory applications. They are supplied with a simple positioning scale calibrated in millimeters attached to the side of the rail. The ledges on each side of the rail are designed for clamping to an optical table or similar mounting surface.



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### TriRail™ – Aluminum

Catalog Number	Description	Price US
22-6886	Aluminum Triangular Optical Rail, 1/2 m	\$109.00
22-6894	Aluminum Triangular Optical Rail, 1 m	\$159.00
22-6928	Aluminum Triangular Optical Rail, 2 m	\$249.00

# TriRail™ Carriers

- **New hole patterns available to suit MiniMech™ and MacroMech™ Positioners**
- **Ideal for teaching labs**
- **Low-cost Aluminum design**
- **Two widths available**

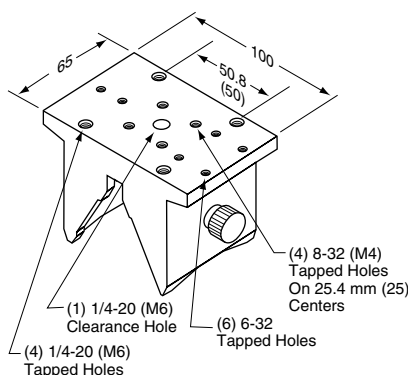
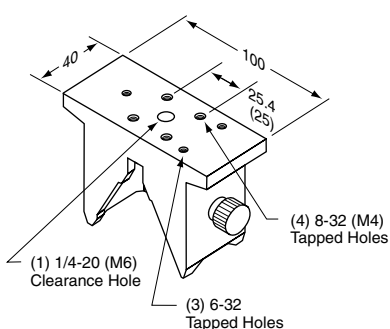


TriRail™ carriers are made of aluminum, which is machined, drilled, tapped and finished in matte black. Two sizes of carrier are offered: a 40 mm wide carrier ideal for use with half-inch mounting posts, and a 65mm wide carrier ideal for use with MiniMech™ or MacroMech™ micropositioners.

Our designers have added two new hole patterns to the mounting surfaces of these popular Triangular Rail Carriers. For example, the 65mm wide carrier

now has an M6 on 25mm pattern for the metric carrier and a 1/4-20 on 1 inch pattern on the inch carrier. This enables TriRail carriers to offer even more mounting options.

These carriers are fully “backwards compatible” with the carriers, pillars and vertical slides from the Ealing triangular bench range.



TriRail Carriers are ideal for use with half inch post holders and our range of dovetail slides.

## TriRail™ Carriers

Catalog Number	Description	Price US
53-3679	TriRail Carrier 40mm wide, metric	\$94.00
53-3687	TriRail Carrier 65mm wide, metric	\$109.00
61-3679	TriRail Carrier 40mm wide, inch	\$94.00
61-3687	TriRail Carrier 65mm wide, inch	\$109.00

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# TriRail™ Dovetail Stages

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- **Ideal for use with TriRail™**
- **1-3 axis assemblies**
- **Compact dovetail slide/leadscrew design**
- **25mm travel with graduated scale**
- **Side locking screw**
- **Optical Table or Rail Mounting**



## TriRail™ Dovetail Stages

These new stages are constructed from machined aluminum and incorporate a dovetail slide/leadscrew design. TriRail Dovetail Stages provide a low cost alternative to the more accurate MiniMech™ and MacroMech™ stages described in the Manual Micropositioners section of this catalog. They are very versatile, and allow multiple axis assemblies to be built using the hardware described below (see diagrams opposite). These multi-axis assemblies can be attached directly to an optical table via clearance

holes in the stage base, or they can be attached to a TriRail™ carrier. They can also be stacked on top of MiniMech or MacroMech positioners.

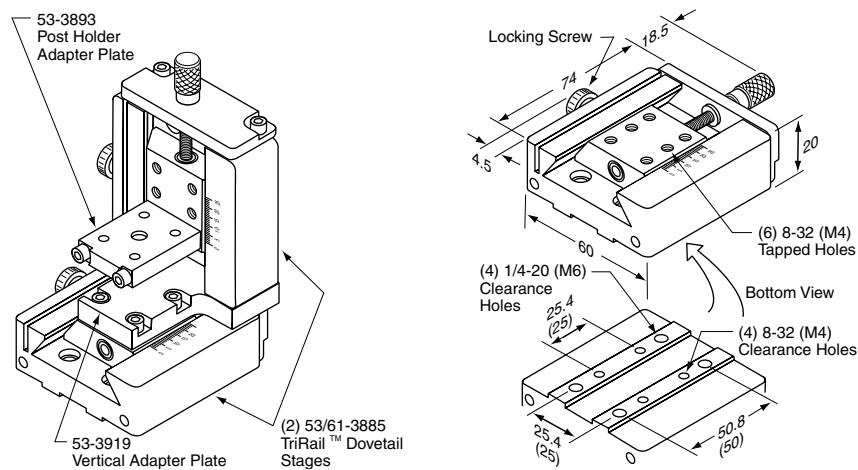
oriented stage as shown in the diagrams opposite giving fine positional adjustment of the post holder in either the horizontal or vertical direction.

## Dovetail Stage Post Holder Plate

The post holder plate allows Half-inch post holders to be attached to the Dovetail Stage. The plate can be attached to a horizontally or vertically

## Dovetail Stage Vertical Adapter Plate

This adapter plate allows a Dovetail stage to be mounted vertically on top of another Dovetail Stage.



Multi-axis assemblies can be built from these modular stages, as shown in the photograph above and the diagrams on the next page.

## TriRail™ Dovetail Stages

Catalog Number	Description	Price US
53-3885	TriRail Dovetail Stage 25mm travel, metric	\$136.50
61-3885	TriRail Dovetail Stage 25mm travel, inch	\$136.50
53-3893	Dovetail Stage Post Holder Adapter Plate, Universal	\$34.50
59-3913	Dovetail Stage Vertical Adapter Plate, Universal	\$34.50

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# Dovetail Stage Assemblies



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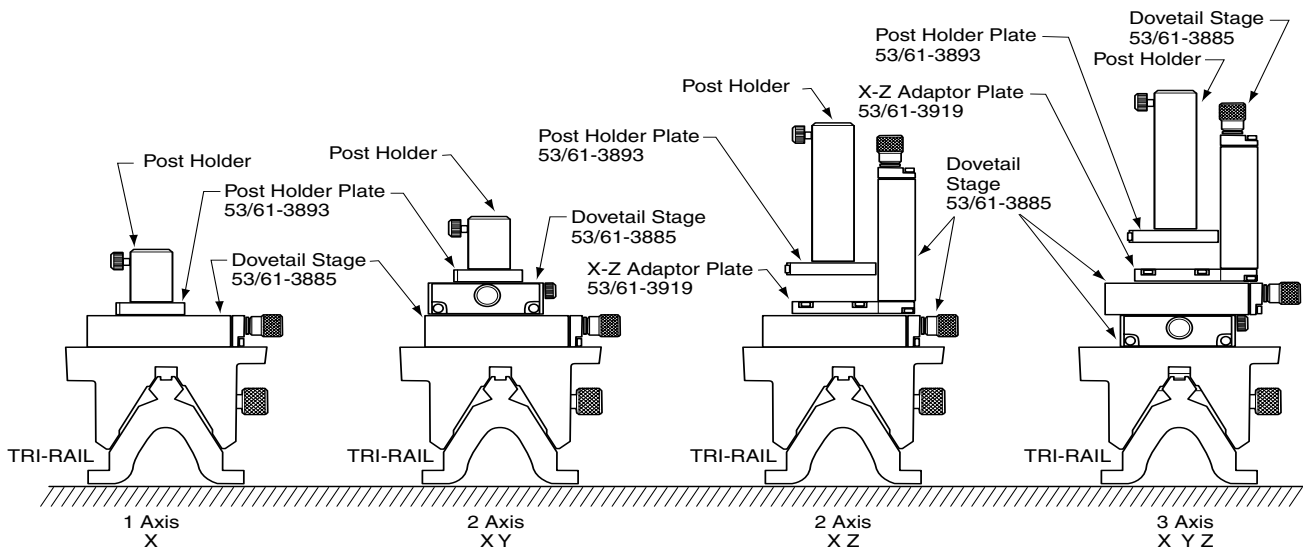
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## Opto-mechanics

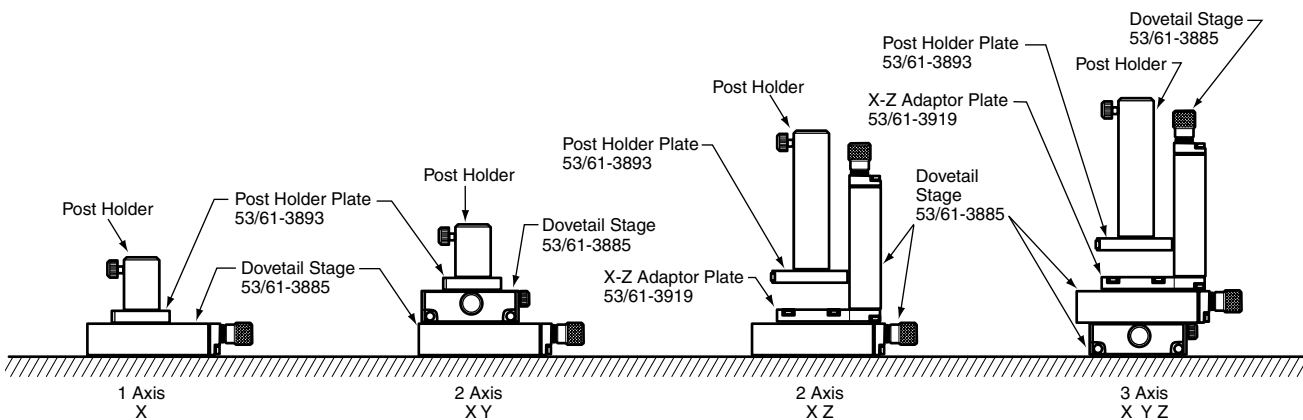
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