

## Mini-Hexapod Platform System

- Low cost 6-axis control system (<\$15K)
- Precision motions, with step resolutions of 0.003175 millimeters (0.000125")
- Stable motions, with position repeatability better than 0.001 millimeters (0.00005")
- Designed for 2.0 Kg Loads (~5 pounds)
- 25mm (~1.0") range of motion in XYZ
- 20 degree range of rotation about XYZ
- Low backlash, less than 1.0 micron (0.00005")
- Power efficient, holds position with no power
- PC Windows interface for easy 6D motion programming and movements



The Mini-hexapod platform (MHP) system is a relatively low cost kinematics platform that allows motion with six-degrees of freedom. These motions are in the X, Y, and Z direction, with rotations about those axes. Six linear actuators are placed in a triangular pattern to achieve a rigid, stable, and precise movement while carrying a Load. With its dedicated drive electronics and Windows user interface, the control of the platform's motions is simplified for ease of use.

If your application requires slow precise point to point motions with 0.001 millimeter repeatability, then you do not need the more expensive platforms on the market. The Mini-hexapod platform system may be the answer you have been looking for.

### Picard Industries

4960 Quaker Hill Road, Albion, New York 14411

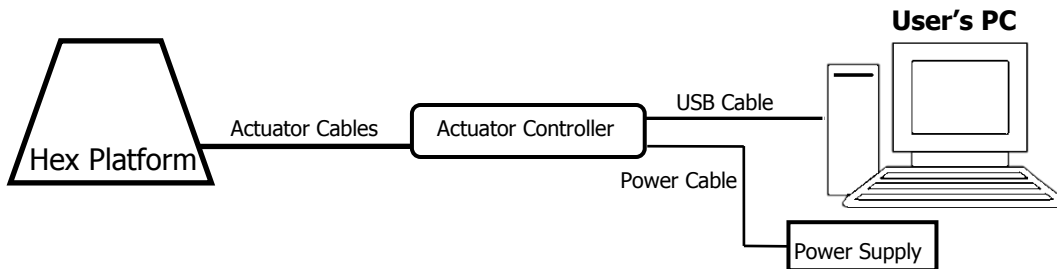
(585) 589-0358

[eng@Picard-Industries.com](mailto:eng@Picard-Industries.com)

[www.Picard-Industries.com](http://www.Picard-Industries.com)

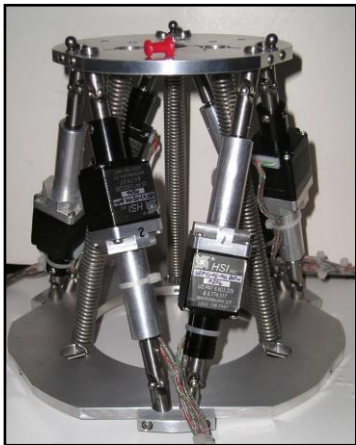
### System Basics

The Mini-Hexapod platform (MHP) system consists of a six actuator (Hex) movable Platform, an actuator Controller, Power supply, Cables, and a Windows based (user supplied) PC with a USB port. The actuators are commanded to move the platform by the User with the PC through its USB port. The User's Cartesian coordinate move commands are transformed into commands for moving each of the six actuators using the Actuator Controller. Status and positional information of each of the actuators is also provided to the PC from the controller.



### Customization

Picard Industries specializes in custom application and design of the MHP system. Many different sizes of linear actuators are available to fit your requirements. Below are a few different size examples of our capabilities.



**MHP-11**



**MHP-17**



**MHP-14**

**Picard Industries**

Tel: (585) 589-0358