

**Products**
Joysticks:

- Mini Force Joysticks
- Mini Displacement Joysticks
- Fingertip Displacement Joysticks (Pot Output)
- Fingertip Displacement Joysticks (Hall Effect)

Grips:

- Aluminum Std ambidextrous
- Plastic Std ambidextrous
- Custom Ergonomic Shapes

Hand Controls:

- Single Grip
- Dual Grip
- Pot Output
- Hall Effect Output

Trackballs:

- Desktop
- Sub Panel
- MAGTRAK Waterproof

Encoders:

- Sealed Optical Encoders
- Low Friction

Systems:

- Custom Panels
- Bullnose Panels
- Multiple Input Devices
- Cockpit Systems
- Ground Stations
- Fire Control Panels

## Model 5000C Mini Displacement Joysticks

The world first precision two axis non-contacting Mini Displacement Joystick offers a more “familiar” feel as an alternative to Mini Force Joysticks. Model 5000C converts operator input to analog output voltages proportional to angle of joystick vs. input voltage. Using the same patented Hall effect technology introduced by Ultra MSI in 1998 (U.S. Patent No. 5850142), Model 5000C provides a high integrity precision displacement alternative – in a small package -- to small potentiometer Joysticks.

The small size and weight make them ideal solutions where precision control is required and joystick displacement is preferred but a larger device is not practical. These joysticks are among the smallest devices of their kind available.



**Model 5000CL Miniature Hall Effect Joystick**

### Applications:

- Computer Graphics/Cursor Control
- Mapping, X-Y Inspection Table
- Robotics, Medical Surgery/Cursor
- Security Cameras, Video Cameras
- Vehicle Control, Flight Control, Manned and Unmanned
- Electric Wheelchair
- Hoists, Cranes, Industrial Processing

### Technical Info:

- Panel Mount Hole Configuration: (1) 1.13" Dia. hole (affix with set screws)
- Max Overall Width: 1.13" Dia.
- Depth Below Panel: 1.33"
- Height Above Panel: 0.57"
- Max. Non-Destructive Force – 8 lbs.
- 20 degree joystick deflection in all directions
- Full Scale Output Force: 1.0 lbs.
- Power Requirements: 5.0 VDC @ <21mA
- Full Scale Output: 0.5 VDC to 4.5 VDC
- Operating Temp: -32C to + 85C
- Storage Temp: -55C to +125C
- Sealing: IP67 Above Panel; IP55 Below Panel
- Shock: 200g @ 1mSec Half Sine
- ESD Immunity: >15KV at Handle and Boot
- Life: 20 Million Cycles

### Features:

- Overall simplicity of design
- 20,000,000 Cycle Reliability Rating
- Extremely Small package
- Excellent temperature stability
- Low power dissipation
- Linear outputs with uniform force gradients in all directions
- EMI immunity superior to inductive joystick designs
- Ergonomic knob provides tactile feedback to operator even through gloves

### Options:

- Light and Heavy Output Forces
- Optional Bushing (Panel) Mount available soon

Please Consult Factory for available Options or Customization requests.

**Consult Factory for Product Customization**

