



INDUSTRIAL CONTROL SOLUTIONS

Handy-Grips® Ergo-Grips® Joystick Bases

P.O Box 23801
Portland, Or 97281-3801

7943 SW Cirrus Dr.
Beaverton, Or 97008

1-800-621-8754

mechanical Joysticks



JS - 2050 - HD series

The Cyber-Tech JS-2050-HD mechanical joystick is tough, reliable, and affordable. The rugged design promises years of flawless operation. With only one moving part the user receives smooth, accurate contacting and a unique spring-return-to-center mechanism.

Its versatile design insures the joystick will work effectively on both stationary equipment and mobile machinery. The JS-2050-HD is available in single or dual axis spring-return-to-center. Both versions come standard with 1/2 NPT female mounting thread or optional ball knob.

Through the JS-2050-HD design process the focus was on the end user. The joystick has a travel distance of 12 degrees in both the X and Y axis from center and a force switch contact adjustable from 2-6 lbs. It also comes standard with a 16 amp electrical rating. If you are looking to save money without sacrificing quality and function the JS-2050-HD is for you.

www.cyber-tech.net

mechanical Joysticks *JS-2050-HD series*

Mechanical Specifications

Maximum handle travel:

12 +/- 1 degrees (On X/Y Axis)

17 +/- 1 degrees (On 45° Axis)

Force to switch contact from mounting adaptor:

6lbs (96 oz) @ contact (On X/Y Axis)

8.48lbs (135.68 oz) @ contact (On 45° Axis)

Force to switch contact from control grip:

2lbs (32 oz) @ contact (On X/Y Axis)

2.82lbs (45.12 oz) @ contact (On 45° Axis)

Electrical Specifications

Contact Rating: 16 Amps @ 125/250 VAC

Life: 5,000,000 +

Insulation Resistance: 100 M W minimum

Dielectric Strength: >1000 V RMS at sea level

Operating Temperature: -25° C to 85° C (std)

ELECTRICAL WIRING OPTIONS:

Standard Wiring: N.O.

Optional Wiring: N.C. or Custom.

WIRING GUIDELINES:

All wire must be protected from mechanical abuse.

Please refer to installation guideline for proper wire run.

2050-HD Key Features

1 - 1/2 NPT mounting thread (std)

2 - Protective non-wear slider

3 - 12ga steel drop mount plate

4 - 1 center spring

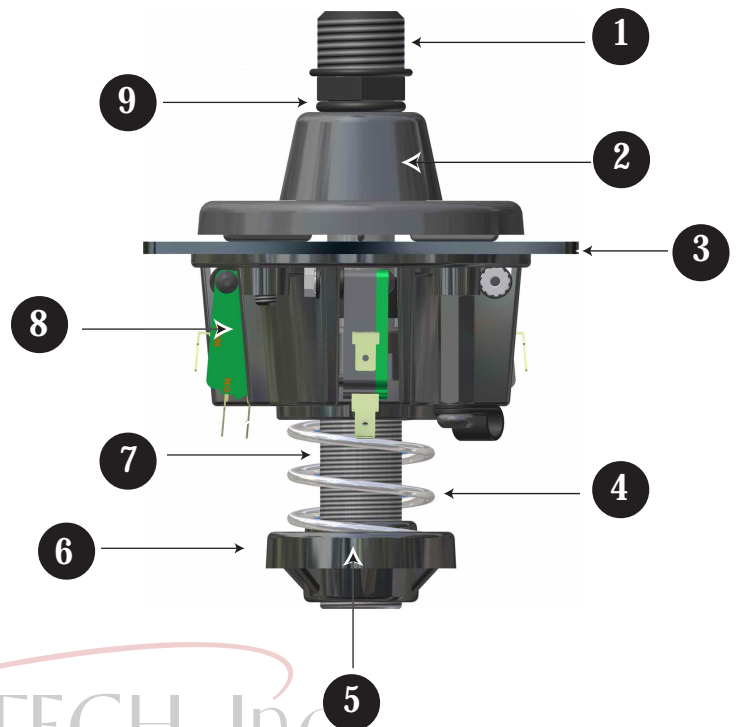
5 - Cable exit

6 - Spring adjustment nut

7 - Control stick (only moving part)

8 - Fast & easy switch replacement

9 - Protective seals



CYBER·TECH, Inc.

mechanical Joysticks *JS-2050-HD series*

General Dimensions

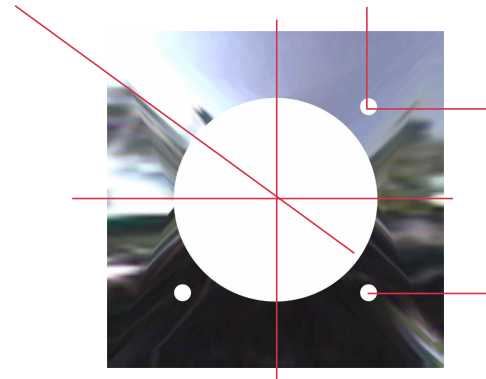
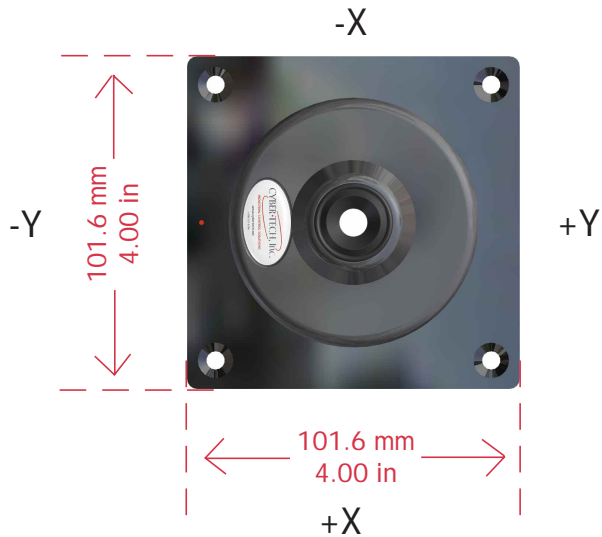


Figure 4A
DROP-IN MOUNTING PATTERN

JS-2050-HD Mounting Instructions

Center hole cutout = 0 3.63

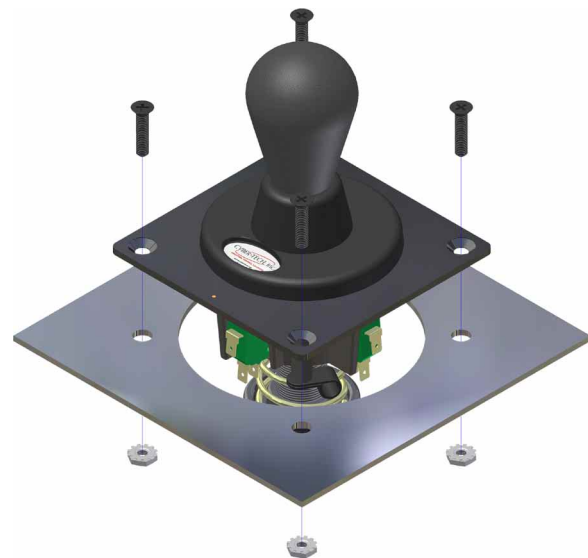
Mounting screw holes = 0 0.25

Panel install (top mount only) drill and tap for the 10/32 thread

Torque rate = 30 IN-LBS

Recommend the use of Loctite 272

OVER TIGHTENING OF IMPROPER TORQUE SPECIFICATION
MAY RESULT IN STRIPPING OR SNAPPING THE SCREW.



For all top-mount joysticks, Cyber-Tech, Inc. recommends that edges of all openings be deburred and cleaned to ensure proper seal. (Please refer to Figure 4A for cutout dimensions.) Special Sealed Mounting Kit available, Part # 99-020002-01

All of Cyber-Tech, Inc.'s Handy-Grips and Ergo-Grips will fit through the specified cutout hole except the 1801-RB which require a split-mount. Split-mounts consist of removing the handle from the joystick base, mounting the joystick base to the panel and then remounting the handle to the joystick base.

If you have a special installation problem or concern, please call the technical staff at Cyber-Tech, Inc. for assistance. Thousands of successful installations of our controls have been made and we will be happy to share our twenty years of expertise to help you make your installation a success.

CYBER-TECH, Inc.

www.cyber-tech.net

mechanical Joysticks *JS-2050-HD series*



Ordering Information

JS-2050-HD

JS Series mechanical joystick, dual axis, 1/2 NPT mounting thread, spring, adjustable spring return to center.

JS-2050-HDS

JS Series mechanical joystick, single axis, 1/2 NPT mounting thread, adjustable spring return to center.

JS-2050-HDC

JS Series mechanical joystick, dual axis with cross gate, 1/2 NPT mounting thread, adjustable spring return to center.

Warranty

Standard Product Line Handy-Grip®, Ergo-Grip®, Mini-Grip®, Pendant-Grip and Joysticks

1. LABOR: For a period of (180) days from date of purchase, if this product is determined to be defective, Cyber-Tech, Inc. will repair or replace the product, at its option, at no charge. After the Warranty Period you must pay for all labor charges.
2. CYBER-TECH, INC. PARTS: In addition, Cyber-Tech, Inc. will supply, at no charge, new or rebuilt replacement in exchange for defective parts manufactured by Cyber-Tech, Inc. for a period of (1) year from date of purchase.
3. 3rd Party PARTS: In addition, Cyber-Tech, inc. will supply, at no charge, a replacement in exchange for defective parts manufactured by 3rd party suppliers, for period of (90) days from date of purchase.

(Certain electronic components such as potentiometers, switches, relays etc. do not apply)

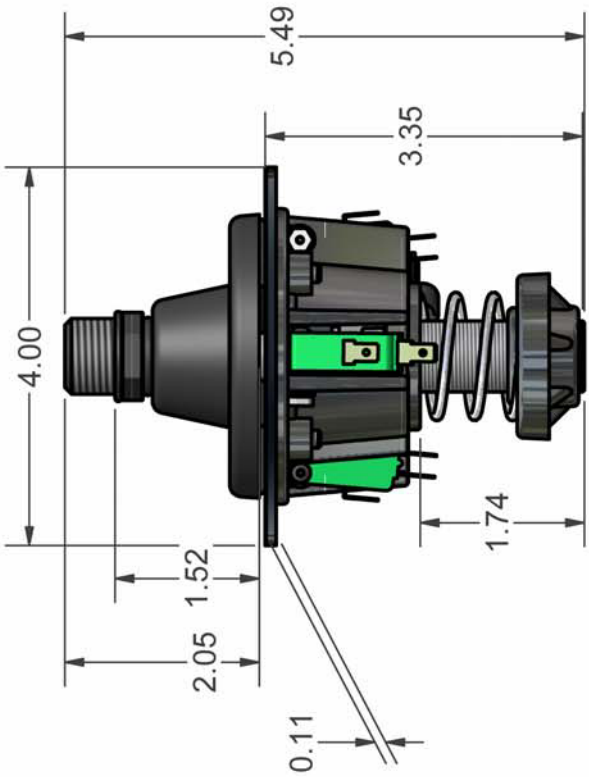
4. CYBER-TECH, INC. SPARE SWITCHES: In addition, Cyber-Tech, Inc. will supply, at no charge, a replacement in exchange for defective parts manufactured by CYBER-TECH, INC., from period of (180) days for date of purchase.

To obtain warranty service, you must deliver the product freight prepaid to Cyber-Tech, Inc. in either its original packaging or packaging affording an equal degree of protection. This warranty does not cover customer installations, setup or wrongfully supplied voltage. This warranty does not cover cosmetic damage due to act of God, accident, misuse, abuse, negligence, or modification of or any part of the product. This warranty does not cover damage due to improper operation or maintenance and connection of improper voltage.

CYBER-TECH, INC.

www.cyber-tech.net

REVISION HISTORY				
ZONE	REV	DESCRIPTION	DATE	APPROVED
1	B	Value	6/18/2003	keith



ELECTRICAL SPECIFICATIONS:

Contact Rating: 16 Amps @ 125/250 V AC
 Life: 5,000,000 +
 Insulation Resistance: 100 M W minimum
 Dielectric Strength: >1000 V RMS at sea level
 Operating Temperature: -25° C to 85° C (std)

ELECTRICAL WIRING OPTIONS:

Standard Wiring: N.O.
 Optional Wiring: N.C. or Custom.

WIRING GUIDELINES:

MECHANICAL SPECIFICATIONS:

Maximum handle travel:

- 12 +/- 1 degrees (On X/Y Axis)
- 17 +/- 1 degrees (On 45° Axis)

Force to switch contact from mounting adaptor:

- 6 lbs (96 oz) @ contact (On X/Y Axis)
- 8.48 lbs (135.68 oz) @ contact (On 45° Axis)
- Force to switch contact from control grip:
- 2 lbs (32 oz) @ contact (On X/Y Axis)
- 2.82 lbs (45.12 oz) @ contact (On 45° Axis)

DRAWN	keith	6/18/2003
APPROVED		
Phone:	1.800.621.8754	
Phone:	503.620.2285	
Fax:	503.620.8580	
Web:	www.cyber-tech.net	
e-mail	engineering@cyber-tech.net	

Cyber-Tech, Inc.		
MECHANICAL JOYSTICK		
SIZE	DWG NO	REV
A	JS-2050-HD	B
SCALE	.5/1	SHEET
		1 OF 1