



## **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 - 500 - HD series

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The Cyber-Tech, Inc. JS-500-HD Series is a high quality, reliable industrial joystick. The rugged design yields flawless operations day after day in harsh, demanding environments. The JS-500-HD Series joystick is equipped with a 13lb spring-return-to-center assembly, long life 16 amp switches, adjustable cams and nylon bushings at critical wear points. These features combine to provide ease of operation and minimal downtime.

Custom options on the JS-500-HD are also available. The addition of proportional interfacing is straightforward and adjustment to your desired output is as simple as flipping the switch on the proportional control card.

Cyber-Tech, Inc. engineered this unit to adapt to most handles and equipment on the market and is backed by our exceptional warranty, customer service and technical support.

With products field tested for over 20 years you can be confident that we have a product to fit your particular application. If you have any questions or would like technical information on the JS-500-HD please give us a call.

[www.cyber-tech.net](http://www.cyber-tech.net)

# *mechanical* Joysticks *JS-500-HD series*

## Mechanical Specifications

### Maximum handle travel:

16 +/- 2 degrees (On X/Y Axis)

18 +/- 2 degrees (On 45° Axis)

### Force to switch contact from mounting adaptor:

10 lbs (160.00 oz) @ contact (On X/Y Axis)

12 lbs (192.00 oz) @ contact (On 45° Axis)

### Force to switch contact from control grip:

5 lbs (80.00 oz) @ contact (On X/Y Axis)

6.5 lbs (104. 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.

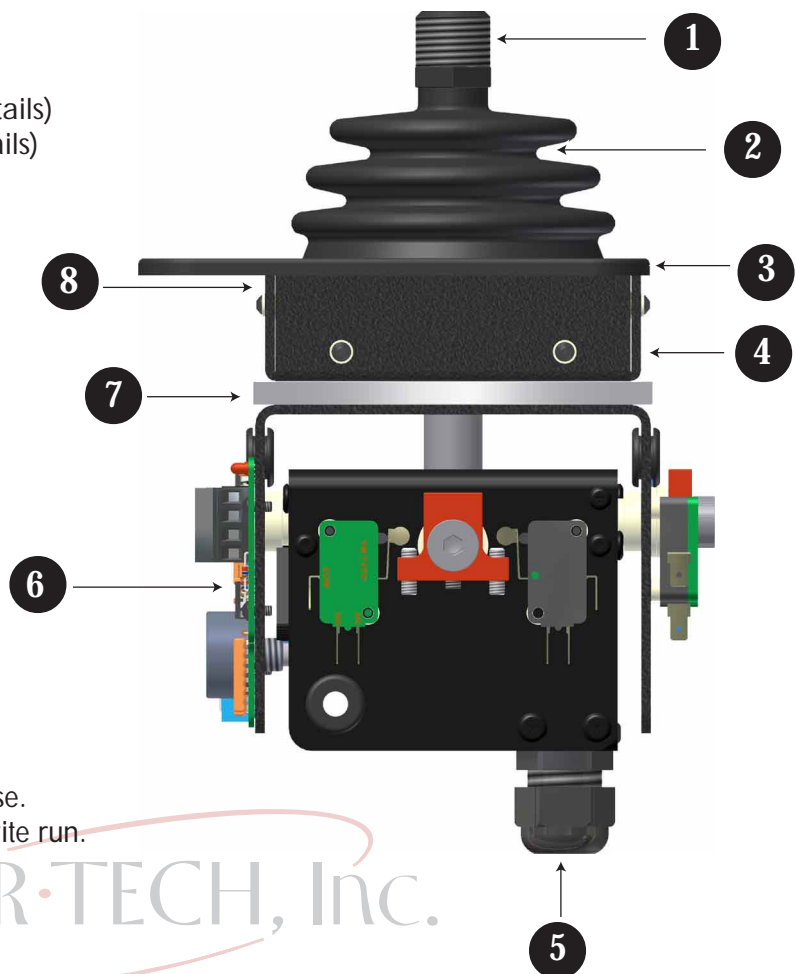
Optional Wiring: N.C. or Custom.

### ELECTRONIC OPTIONS:

1. CT-POT CARD (reference to data sheet for details)
2. PCVS System (reference to data sheet for details)

## 500-HD Key Features

- 1 - 1/2 NPT mounting thread (std)
- 2 - Protective boot
- 3 - 12ga steel mounting plate
- 4 - Spring assembly
- 5 - Cable exit
- 6 - Proportional option
- 7 - Gate option
- 8 - Boot seal flange



### WIRING GUIDELINES:

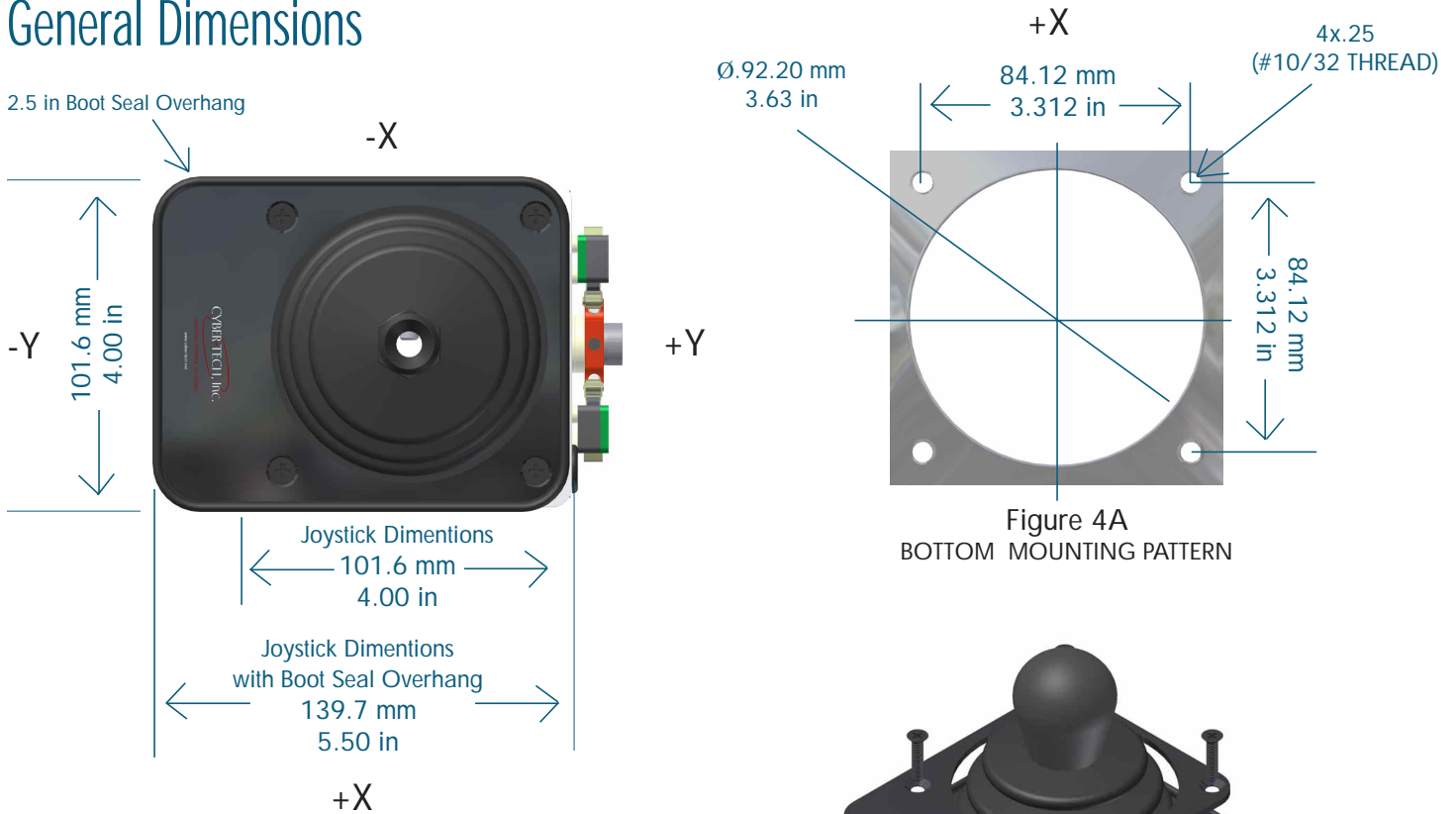
All wire must be protected from mechanical abuse.

Please refer to installation guidelines for proper wire run.

CYBER·TECH, Inc.

# mechanical Joysticks JS-500-HD series

## General Dimensions



## JS-500-HD Mounting Instructions

Center hole cutout =  $\varnothing 3.63$   
Mounting screw holes =  $\varnothing 0.25$   
Panel install (bottom mount only) drill .25 pass through holes  
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 bottom-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.)

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.

# *mechanical* Joysticks *JS-500-HD series*



Shown with optional CT-Pot Card

## Ordering Information

### **JS-500-HDS**

JS Series mechanical joystick, single axis, 1/2 NPT mounting thread, spring return-to-center with connector interface.

### **JS-500-HD**

JS Series mechanical joystick, dual axis, 1/2 NPT mounting thread, spring return-to-center with connector interface.

### **JS-500-HDC**

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

## 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., for period of (180) days from 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.

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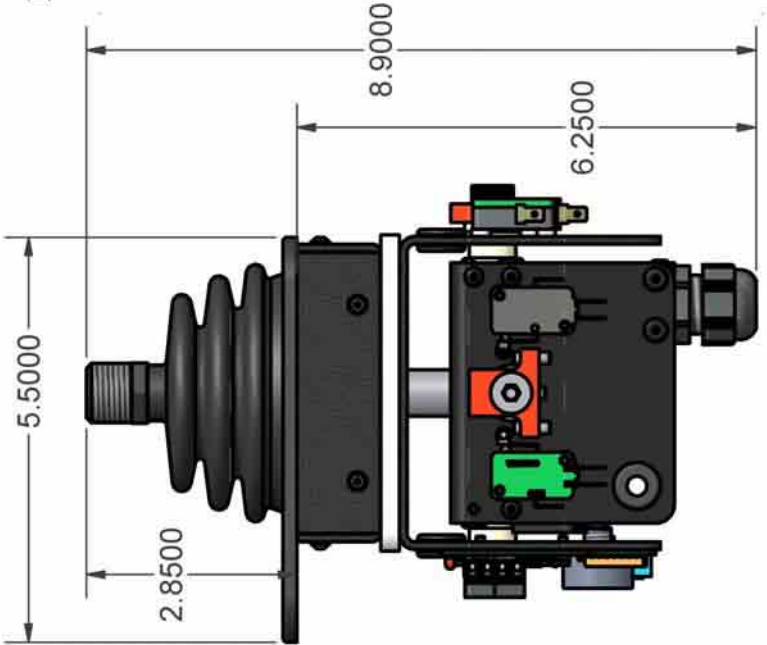
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ZONE	REV	DESCRIPTION	DATE	APPROVED
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**Mechanical Specifications**

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**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.

**Electronic Options**

1. CT-POT Card (Ref to data sheet for details)
2. PCVS System (Ref to data sheet for details)

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DRAWN	K Dowers	9/10/2003
APPROVED		
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Fax:	503.620.8580	
Web:	www.cyber-tech.net	
e-mail	engineering@cyber-tech.net	

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Cyber-Tech, Inc.	
Mechanical/Proportional Joystick	
SIZE	DWG NO
A	JS-500-HD
SCALE	SHEET
.4	1 OF 1
P # 1.800.621.8754 Fax # 503-620-8580	

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Mechanical/Proportional Joystick	
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