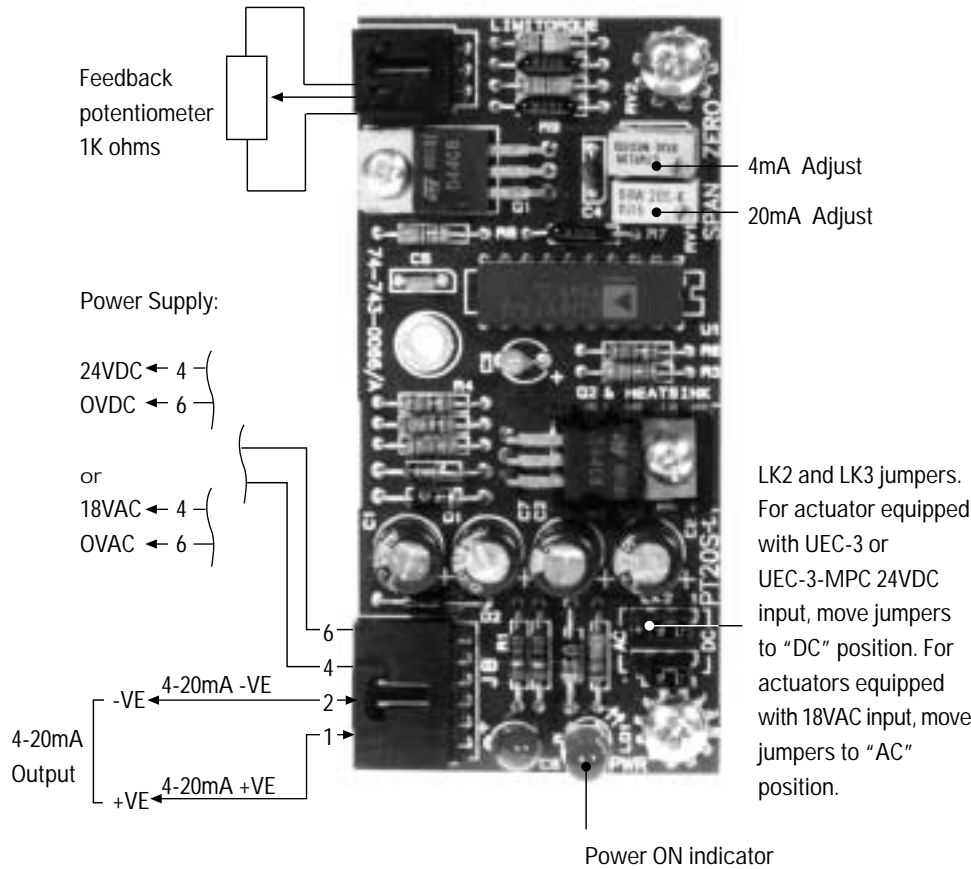


Calibration Instructions

For use with non-UEC controls only; to use with UEC-3 controllers, please see bulletin 440-12000, UEC-3 Operation Manual



Specification

Output signal

- 4-20mA

Input potentiometer

- 1K (ohms)

Temperature rating

- -40 to +85°C

Linearity error

- ±1% max.

Loop resistance

- 370 (ohms) max.

Power

- 18 VAC or 24 VDC ± 10% (LK2 and LK3 must be set appropriately)

Important note

Analog inputs must not be connected to earth ground on +VE or -VE terminal.

Calibration procedure

1. Position the actuator to mid-travel (valve at 50% Position).
2. Disconnect the potentiometer wiring harness from the PT20SD board and measure the resistance from each End connection to the center connection on the potentiometer.
3. To set the potentiometer to the correct resistance reading, loosen the setscrew that retains the spur gear on the potentiometer shaft and rotate the shaft until a reading of 500(ohms) is achieved.
4. Tighten the setscrew and reconnect the wiring harness to the PT20SD.
5. Run the actuator fully CLOSED.
6. Calibrate ZERO position by adjusting the zero potentiometer until a 4mA output signal is read at terminals +VE and -VE.
7. Run the actuator fully OPEN.
8. Calibrate SPAN position by adjusting the span potentiometer until a 20mA output signal is read at terminals +VE and -VE.
9. Repeat steps 5 to 8 and fine-tune as necessary.

# Limitorque

Limitorque  
5114 Woodall Road  
P.O. Box 11318  
Lynchburg, VA 24506-1318  
Phone (434) 528-4400  
Fax (434) 845-9736

Limitorque  
Abex Road  
Newbury  
Berkshire, RG14 5EY  
England  
Phone 44-1-635-46999  
Fax 44-1-635-36034

Limitorque India, Ltd.  
302, Mansarovar  
90 Nehru Place  
New Delhi - 110019  
India  
Phone 91-11-6431-748  
Fax 91-11-6432-749

Limitorque Nippon Gear Co., Ltd.  
Asahi-Seimei Bldg. 9F  
1-11-11 Kita-Saiwai, Nishi-Ku  
Yokohama-Shi, (220-0004)  
Japan  
Phone 045-326-2065  
Fax 045-320-5962

Limitorque Australia, Ltd.  
17 Scoresby Road  
Bayswater, Victoria 3153  
Australia  
Phone 613-9729-0555  
Fax 613-9729-8225

Limitorque Asia, Pte., Ltd.  
48A Loyang Way  
Singapore 508741  
Phone 65-214-2120  
Fax 65-214-2123

Information in this publication is believed to be accurate. Limitorque reserves the right to modify published information to reflect product improvements or changes. Please contact Limitorque if certified data is required. Products sold and licensed by Limitorque are covered by the warranty appearing in its standard terms and conditions of sale.

Limitorque is a registered trademark of Limitorque Corporation. The latest revisions to this document are available on-line from Limitorque's web site.

440-30001 Issue 5/98  
© Copyright 2002 Printed in U.S.A.



Limitorque  
5114 Woodall Road  
P.O. Box 11318  
Lynchburg, VA 24506-1318  
<http://www.limitorque.com>