GENERAL

The Model 380V Slidewire Converter Module accepts a slidewire input and provides a proportional current output of either 4 to 20 mA or 10 to 50 mA dc. The two current output ranges are field selectable by cutting a jumper wire on the circuit board.

Span and zero adjustments provide wide range capabilities and allow for a simple calibration procedure. Current limiting is provided to protect connected instruments against input overdrive.

SPECIFICATIONS

Input: Retransmitting Slidewire
Std. 3-wire 100 to 5000 Ohms

Input Impedance: 1 Meg Ohm (typical)

Slidewire Excitation: 1V (nominally)

Output: Range: 4-20 mA or 10-50 mA
Load: 4-20 mA; 0-1000 Ohms max.
10-50 mA; 0-360 Ohms max.

Load Effect: Less than 0.1% over entire load range

Current Limiting: 150% F.S.

INSTALLATION

Using the Card Cage Enclosure Instructions as a reference (Service Instructions, SD3801), set the keys as follows:

Left Key: V (vertical)
Right Key: V (vertical)

If the transmitter is factory calibrated, insert the module into the proper slot in the card cage enclosure. If it is not factory calibrated, refer to the CALIBRATION section of this instruction.

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Electrical connections to the module are made at the terminal strip on the card cage enclosure. The connection diagram identifies customer connections.

For proper operation, the slidewire must be totally floating, as there is no isolation between input and output or power.

**CALIBRATION**

**OUTPUT SPAN**

If your unit is factory calibrated, go to Adjustment Procedure below to verify or change calibration. If your unit was not calibrated, select the output current range before going to the Adjustment Procedure.

- OUTPUT 4-20 mA: J1 & J2 OUT
- OUTPUT 10-50 mA: J1 & J2 IN

**ADJUSTMENT PROCEDURE**

1. Connect the transmitter as shown in the connection diagram. Your input should be the actual slidewire it is going to be used with, and the load on your transmitter should be within the limitations listed under OUTPUT of the SPECIFICATIONS section of this instruction.

2. Connect a voltmeter (20kΩ/V or greater input impedance) to the test points TP(+) and TP(-) located on the front of the card.

3. Set your slidewire to the minimum position for your application and adjust the 20-turn pot. marked IN:ZERO until the meter at TP(+) and TP(-) reads 0.000 volts ±0.25mV.

4. Remove your meter from TP(+) and TP(-). All further measurements will be made at the input and output of this card.

5. Set your slidewire to the minimum position for your application and adjust the 20-turn pot. marked OUT:ZERO to give minimum output for the range you selected, such as 4 mA or 10 mA.

6. Adjust the slidewire to its maximum position for your application and adjust the 20-turn pot. marked SPAN to give maximum output for the range you selected, such as 20 mA or 50 mA.

7. Repeat steps 5 and 6 until readings converge. Instrument is now calibrated.

**MAINTENANCE**

These instruments are solid state and require no maintenance on a regular basis, except for annual cleaning, blowing out dirt, and verifying calibration. If the transmitter is not operating properly, remove it and give it a full bench check-out. Most problems are in field wiring or peripheral circuitry. If the problem is traced to the unit itself, conventional electronic troubleshooting methods suffice.
Terminal strip on Series 380 rack enclosures.

NOTE 1: See output specification for load limits.