GENERAL

The Model 380W 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.

The converter may be used with slidewire spans as small as 50 Ohms. The converter has input isolation allowing the use of common mode signals up to 100V dc.

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: Type: Retransmitting slidewire(Std. 3 wire)
Span: 100 to 5000 Ohms
Impedance: 1 Meg. Ohm (typical)
Span Adjustment: 25 to 100% of slidewire resistance
Zero Adjustment: 0 to 75% of slidewire resistance
Isolation: 100 V dc (common mode)

Output:
Range: 4 to 20 mA or 10 to 50 mA dc
Load: 4 to 20 mA - 0 to 1000 Ohms maximum
10 to 50 mA - 0 to 360 Ohms maximum
Load Effect: Less than 0.1% over entire load range
Limiting: Output current will limit at 150% of range

Slidewire Excitation: 20 mV dc (nominally)
Accuracy: ±0.15% max. at 25°C with standard conditions

INSTALLATION

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

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

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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.

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

CALIBRATION

OUTPUT RANGE

If your unit is factory calibrated, go to Adjustment Procedure 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. Set your slidewire to the minimum position for your application and adjust the zero potentiometer for the minimum output value for the range selected.

3. Set your slidewire to the maximum position for your application and adjust the span potentiometer for the maximum output value for the range selected.

4. Repeat steps 2 and 3 as required.

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.

![CONNECTION DIAGRAM]

Terminal strip on Series 380 rack enclosures.

NOTE 1: See output specification for load limits.
OUTPUT RANGE JUMPERS
4-20mA J1 & J2 OUT
10-50mA J1 & J2 IN

SPAN JUMPER
SPAN ADJUST
ZERO ADJUST

OSCILLATOR BALANCE DO NOT ADJUST

TEMPERATURE COMPENSATION POT DO NOT ADJUST