A2P Amplifier

Manual

1. Introduction

Thank you for choosing the amplifier A2P. A2P is designed for converting mV signal from load cell into a 0~10V or 4~20mA signal. A2P can be connected to 2 load-cells.

The manual here provides the installation, operation and calibration procedures of the product.

2. Connection Diagram

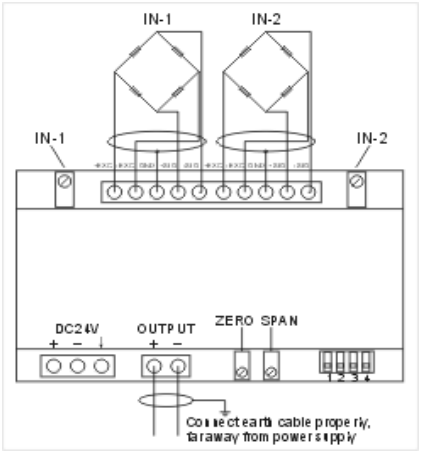


Fig1.Connection Diagram

3. Specification

Power Supply: 24V DC ±10%,≥3W

Input Signal: 0~30mV

Output Signal: 4~20mA or 0~10V

Operating Temperature: -10°C~50°C

Operating Humidity:≤90%R.H.

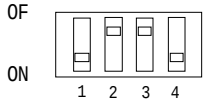
Maximum Input Voltage:30V DC

Maximum Output Current: 40mA

4. Output Mode Switch

OUT:4~20mA
(Output Current)

1	2	3	4
ON	OFF	OFF	ON

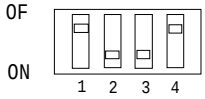


3=OF Excitaton Voltage
4=ON to Load-cell 5V

+E=5V

OUT:0~10V
(Output Voltage)

1	2	3	4
OFF	ON	ON	OFF



3=ON Excitaton Voltage
4=OF to Load-cell 12V

+E=12V

5. Calibration

The calibration of A2P consists of Zero Calibration and Span Calibration.

5.1 Zero Calibration

Step1.Remove all load from the scale platform. If the scale require hooks or chains (tare weight), place the hooks or chains onto the scale for zero calibration.

Step2.Adjust ZERO variable resistor to an output of 0V or 4mA.

(**Note**: Tare weight shall not exceed 30% of full load)

5.2 Span Calibration

Step1.Place full load onto the scale.

Step2. Adjust SPAN variable resistor to an output of 10V or 20mA.

(Note: It's recommended to repeat adjustment in Step 2 of Section 5.2 above three times.)

6. Operation

6.1 Always keep the amplifier clean from dirt to avoid affecting the values of the ZERO and SPAN variable resistors.

6.2 Do not clear the enclosure with acetone and other corrosive liquid.

6.3 For stable amplifier signal output, always use safe and reliable DC power supply.

6.4 When output reading changes, re-calibrate the amplifier according to Section 5, Calibration.

7. Troubleshooting

7.1 No output from the amplifier: Check all wire connections and the DC power supply.

7.2 Output signal is abnormal: Re-calibrate according to Section 5, Calibration.

7.3 Problem cannot be resolved: Contact supplier