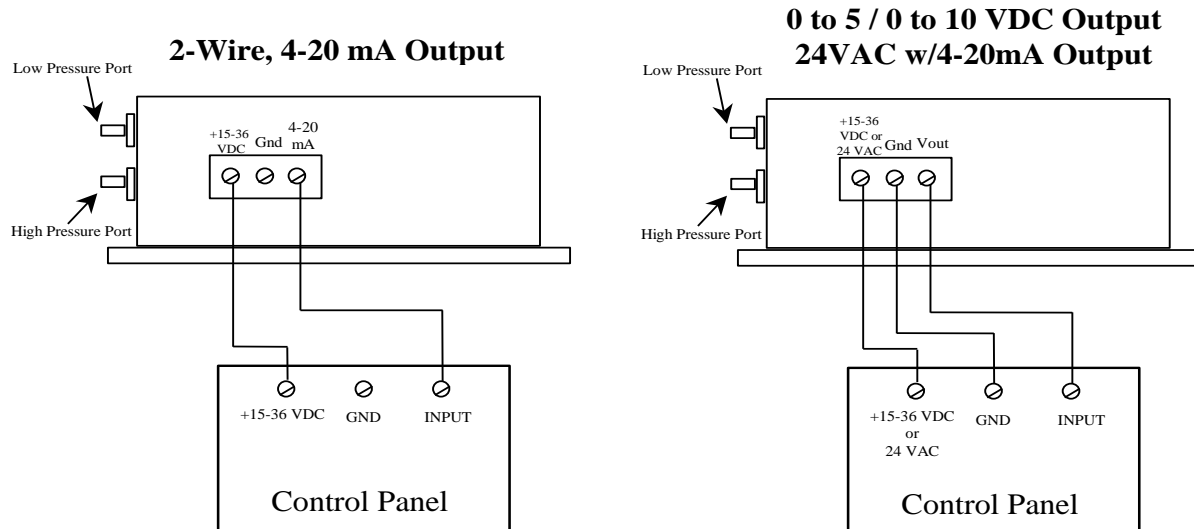


**READ THESE INSTRUCTIONS BEFORE YOU BEGIN INSTALLATION**

■ **WIRING**



All ACI/DP pressure transmitters may be powered from a regulated +15 to 36 VDC or 24 VAC power supply. Several transmitters may be powered from the same supply. At full span, each transmitter draws 20mA. To determine the number of transmitters powered by one supply use the following formula:

$$N = I / 20mA$$

where:  $N$  = number of transmitters  
 $I$  = current available from power supply  
 20mA = current draw of transmitter at full span

example: If  $I = 1.5A$  then:  
 $N = 1.5/20mA$   
 $N = 75$

Therefore, a 1.5A power supply will safely power up to 75 transmitters.

■ **MOUNTING PRESSURE TRANSMITTERS**

The transmitter is factory calibrated and should be installed vertically with the brass fittings pointing downward and the arrow on the label pointing upward. If the unit must be installed flat there may be a zero shift. The shift can be corrected with the zero adjustment located inside the enclosure. To adjust the zero, both pressure ports must be open to the atmosphere. For a uni-directional span the current should be 4 mA, turn the zero adjustment until this reading is achieved. For a bi-directional span, adjust the current to read 12 mA. If the span needs to be adjusted, please contact ACI.

■ **PRESSURE CONNECTIONS**

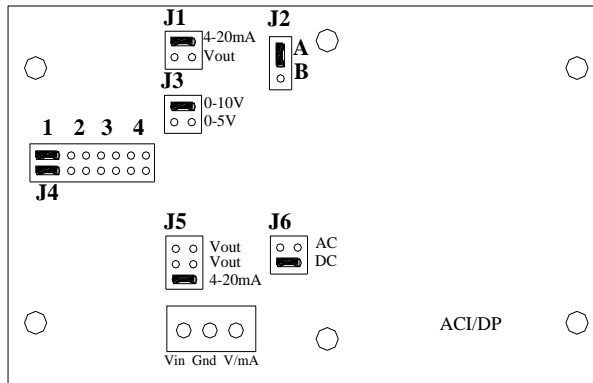
The two 3/16" barbed brass fittings are located on the end of the enclosure. The connecting tubing is recommended to be 1/4" push-on. To achieve the shortest response times, larger diameter tubing can be used on long tubing runs.

All ACI/DP units can handle a maximum pressure of 5 times the sensor range on the High side and 3 times the sensor range on the Low side. If after connecting the tubing, the output is off the scale, disconnect the tubing immediately and check the pressure input with a gauge or other test instrument.

## ■SELECTING ANOTHER SPAN

Each uni-directional ACI/DP unit has the capability of being switched to three spans other than the span ordered. The bi-directional units have only two span capabilities. The switch to other spans is achieved by changing the position of jumpers found inside the enclosure. After opening the enclosure, there will be two sets of jumpers. One is a double row of pins (**J4**) with four positions numbered 1 through 4. The other is a single row of pins (**J2**) with two positions labeled A and B. For a unit ordered with a common span, the table below shows the position the jumpers are placed for both (**J2**) and (**J4**).

ACI/Part No.	SPAN	Jumper Position A		Jumper Position B	
		1	2	3	4
DP1	±1"	-2 to 2"	N/A	N/A	-1 to 1"
DP2	±0.5"	-0.5 to 0.5"	N/A	-0.3 to 0.3"	N/A
DP3	±0.25"	-0.5 to 0.5"	N/A	N/A	-0.25 to 0.25"
DP4	0 - 0.25"	0 to 0.5"	0 to 0.4"	0 to 0.3"	0 to 0.25"
DP5	0 - 0.5"	0 to 0.5"	0 to 0.4"	0 to 0.3"	0 to 0.25"
DP6	0 - 1"	0 to 1"	0 to 0.8"	0 to 0.6"	0 to 0.5"
DP7	0 - 2"	0 to 2.5"	0 to 2"	0 to 1.5"	0 to 1.25"
DP8	0 - 3"	0 to 5"	0 to 4"	0 to 3"	0 to 2.5"
DP9	0 - 5"	0 to 5"	0 to 4"	0 to 3"	0 to 2.5"
DP10	0 - 10"	0 to 10"	0 to 8"	0 to 6"	0 to 5"
DP11	± 5"	-5 to 5"	N/A	N/A	N/A

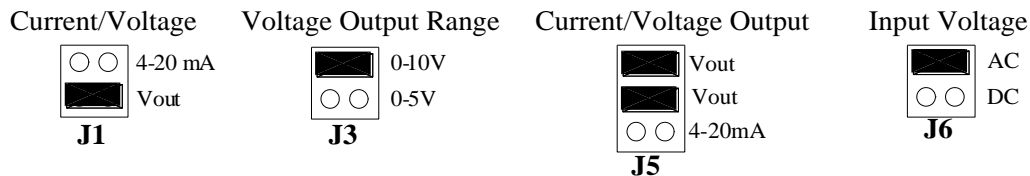


Note: Set all Jumpers for optional spans according to the diagram to the left and the above chart. The chart tells where the jumpers should be placed.

Figure #2

The position of the jumpers on (**J2**) depends on the position of the jumpers on (**J4**). If the jumpers on (**J4**) are in position 1 or 2, the shunt in (**J2**) should be in position A. For positions 3 or 4 on (**J4**), the jumper on (**J2**) should be in position B. If the unit is calibrated to a custom span, please consult the factory for more information.

## ■JUMPER SELECTION DIAGRAMS



## ■TROUBLESHOOTING

No reading	No power to board – check voltage at power terminal – should be between 15-36 VDC or 24 VAC
Reading too low	Not enough airflow, check pitot tubes Improper range of transmitter (too high) - check current – should be between 4 and 20mA
Reading too high	OVERPRESSURE check for a high common mode pressure Improper range of transmitter (too low) - check current – should be between 4 and 20mA Condensation on board - inspect visually
Unstable reading	Air flow is too small; Tubing diameter needs to be increased Condensation on board - inspect visually

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