

ELANE

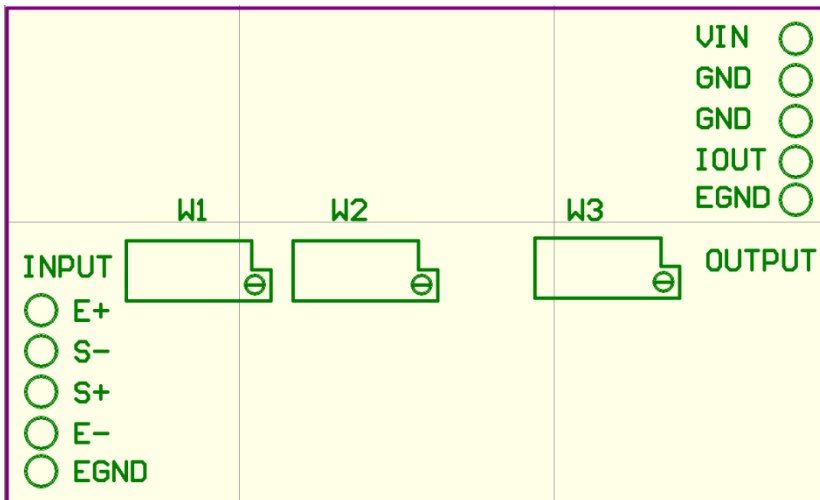
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LOAD CELL TRANSMITTER OPERATING MANUAL

Specifications

- Power: DC12V~24V 100mA MAX
- Output: Current 4~20mA
- Accuracy: Better than 0.1%FS
- Sensitivity of connected load cell: 1mV/V~3 mV/V
- Resistance of load: $\leq 500\ \Omega$ (current output)
- Operating temperature: $0^{\circ}\text{C}\sim+50^{\circ}\text{C}$

Connection and Potentiometer Diagram



INPUT: Load Cell's connection diagram, the definition of each connection pole (from top to bottom) is as follows:

- E+** : excitation supply(+) Red
- S-** : signal(-) White
- S+** : signal(+) Green
- E-** : excitation supply(-) Black
- EGND** : shield (Bare wire)

OUTPUT: Output connection diagram, the definition of each connection pole (from top to bottom) is as follows:

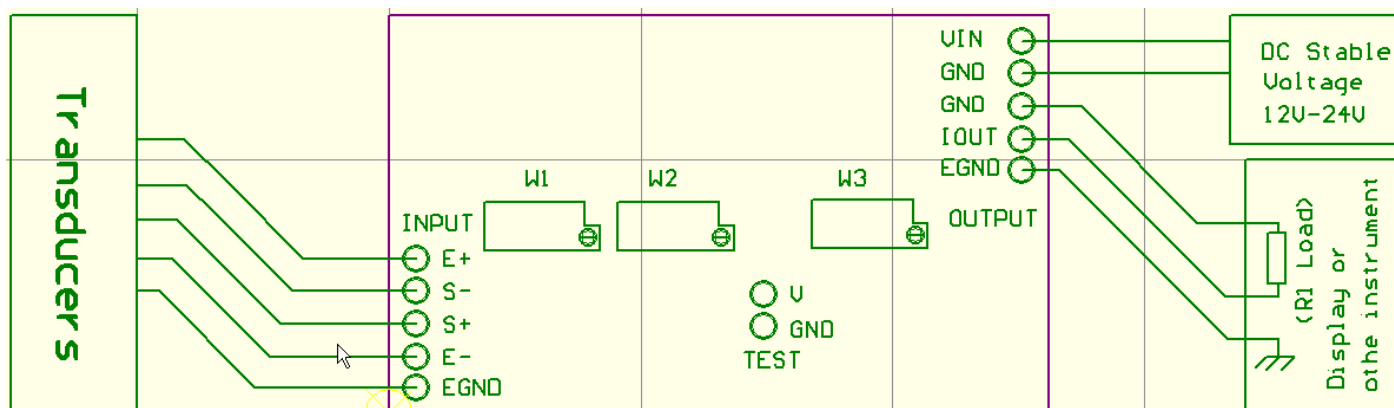
- VIN** : power (+)
- IOU** : current output(+)
- GND** : power(-)
- EGND** : shield

W1: Load Cell's zero adjustable electronic potential

W2: Load Cell's amplification gain adjustable electronic potential

W3: Initial output current zero adjustable electronic potential

Connection Drawing



Adjustment

Looking at the transmitter, you can find the electronic potential and the terminal tabs. Connect the Transducer/Load Cell to Input, and connect the system of measurement to Output, then the power supply to turn on.

1. Adjust W1 first, so as to the voltage between V and GND is 0.5V (check with voltage meter).
2. In IOU and LOAD (250 ohm) series between a current meter, Put nothing on load cell, then adjust w3, obtaining the Initial current output with 4mA.
3. Put full load on load cell, then adjust w2, obtain the full scale output current 20mA (Adjusting w1 has influence on initial output).
4. Remove the weight on the load cell, if the output is not the initial output, repeat the step 1 and 3 until the initial output is 4ma and the full scale output is 20ma.

Installation and Usage

1. Connect strictly as per shown diagram; especially pay attention to distinguishing transducers end and output end. Wrong connection will result in the transducers without output and damage it.
2. Except the adjustable potentiometer, please adjust or change other components on the transmitter.
3. The transmitter should be installed in the place without any surge impact. Installation must be stable and try to avoid bumps. There should have no strong corrosive gas around it.

Troubleshooting

1. Before this step, **you must assure correct connection and adjustment.**

Trouble : No Output

Solution:

- 1) Check power supply.
- 2) Check voltage of E+ and E-, if power supply is good but no excitation voltage, please contact us for replacement.
- 3) If the load cell has excitation voltage but no output signal, please change load cell.
- 4) For the current transmitter, damage will also cause no output.

Trouble : No Reaction on load

Solution:

- 1) Check voltage of E+ and E- or S+ and S-, if load cell has excitation voltage but no output, please change load cell.
- 2) Check if sensitive output under real load is in the range, if not please change load cell.

3) Calculating amplifier or V/I or tracker damaged, please contact us for replacement.

Trouble : Abnormal Output

Solution:

- 1) Check if the load cell parameter changed, if changed, please readjust the transmitter.
- 2) Leach capacitor damaged or voltage switch circuit trouble, please contact us for replacement.