

DITEL: PRODUCTS: DIGITAL STARS: 8000TP



INPUT SENSIVITY

Strain meters for bridge type transducers are configured for an input sensivity (transducer output in mV) of 100mV at full-scale. To modifie this value, replace the resistor R6 for one whose value is given by the following formulas:

N = 2750 / mV R6(ohm) = 12000 / N - 3

where: mV = cell sensivity (in mV) for the constant current that supplies the meter (1.5mA).

If the transducer's specifications are given for an excitation current different from 1.5mA, apply the proportional factor to obtain the mV output at a current of 1.5mA.

DISPLAY READING

After configuring the input sensivity, apply the following formula to determine the value of R18 in order to get the desired display readout (VD).

R18)ohm) = ((553*(2500 - VD)) / VD) - 100

With the resistance value obtained from the formula, the span adjustment margin is set to 20% of the display readout VD.

COMMON MODE REJECTION RATIO

Tie terminals B and C togheter at the input connector and connect two resistors of 1Mohm from this point to pin A and pin D as it is indicated in the figure at right.

Adjust the ZERO potentiometer until OV are obtained between its middle point (slider) and the meter ground (taken at the point -M- of the capacitor).

Adjust finally the RP3 potentiometer until the display registers OV.

DISPLAY RANGE ADJUSTMENT

Connect two resistors of 1kohm between the input C and pins A and D in order to reference this input to the tranducer's excitation.

Connect between pins B and C an accurate reference millivoltmeter replacing the full-scale transducer's signal and adjust the SPAN potentiometer until the display reads the desired value.

Shortcircuit pins B and C and readjust OV with the ZERO potentiometer.

