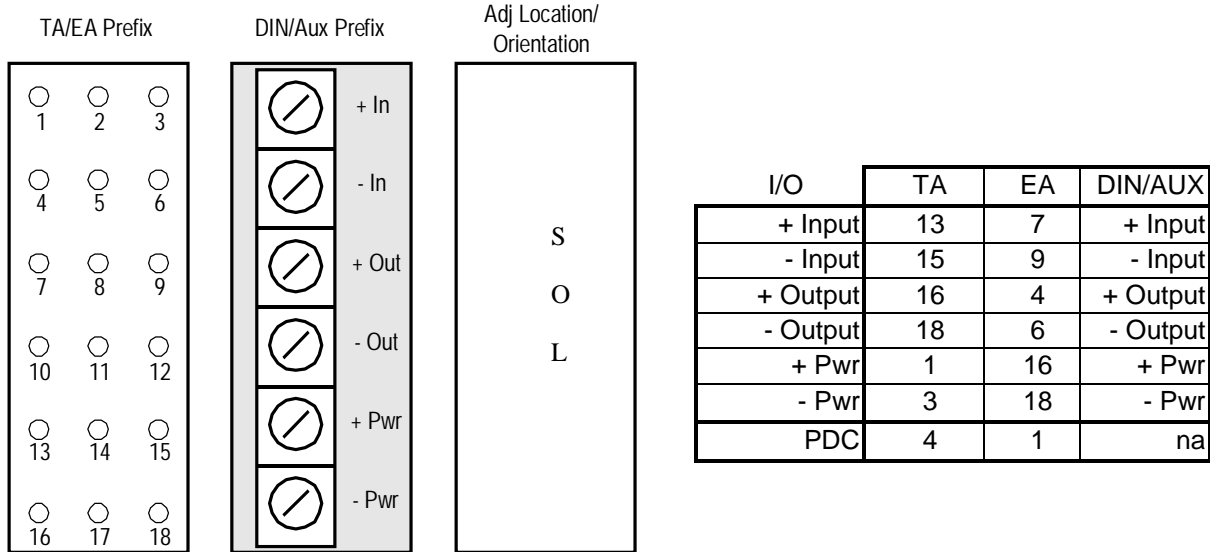


Pulse Duration to Analog Converter

General Adjustment and pin/terminal location as viewed from top of Module



DESCRIPTION

The calibration procedure of the TA-5000 analog to time-pulse converter consists of three steps. First, setting the live zero adjustment (Z) to zero value; second, calibrating offset (O) and span (S); and third, calibrating live zero.

The "Z" adjustment is a feature used when it is desirable to transmit a time pulse live zero signal if the live zero (e.g. 4/20mA) input signal falls below the zero scale value (e.g. 4mA). The "Z" adjust is used on non-zero based outputs only.

The "Z" adjustment does not interact with the "O" and "S" adjustments. However, the "O" and "S" adjustments interact and it is necessary to iterate the "O" and "S" calibration. After the "O" and "S" adjustments have been completed, then the "Z" adjustment is used if required. In the initial calibration procedure, the "Z" adjustment must be set below the "O" adjustment.

All adjustments are fifteen turn potentiometers. Inset small screwdriver through red GLYPTOL and potting material to underlying "slot" slightly below the surface of the module

PROCEDURE

A. Initial Live Zero "L" adjustment

Turn adjustment to full CCW position. (A slight clicking sound can be heard when adjustment is at the full limit of travel).

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B. Calibration of Offset "O" and Span"S"

Alternately apply zero and full scale analog values to input terminals of the module/module assembly. Adjust "O" and "S" to obtain corresponding zero and full scale duration contact closures. Note the standard period of the time duration format is established by a digital clock and cannot be changed in the field. Three or more iterations of adjustment of "O" and "S" may be necessary. CAUTION, after making an adjustment, be certain to wait for an interval of time equal to at least two standard periods to expire before reading the output time duration.

C. Calibration of Live Zero "L"

Remove input and adjust "L" until output pulse duration is equivalent to zero scale output. CAUTION, after making an adjustment, be certain to wait for an interval of time equal to at least two standard periods to expire before reading the output time duration.

CALIBRATION IS COMPLETE

Seal openings of face of module with a drop of red GLYPTOL or nail polish.

NOTE: ()5000 adjustment locations may vary from those shown.