ConLAB

RTR-2

CALIBRATION
INSTRUCTIONS

Calibration Tables

"Zero" Table

Tmin °C	SW1	SW2	SW3
-50… -15	0	0	0
-15… 15	1	0	0
15… 48	0	1	0
48… 82	1	1	0
82… 115	0	0	1
115… 147	1	0	1
147… 180	0	1	1
180… 215	1	1	1

"Span" Table

SPAN	SW4	SW5	SW6
30… 50	0	0	0
50… 75	0	1	0
75… 130	1	0	0
130… 185	1	0	1
185… 350	1	1	0
350… 850	1	1	1

Note: "1" represents the switch "ON" state.

Example
Range needed: Tmin = -50°C
Tmax = 100°C
The Span is 150°C
The switch setting will be: 000101

RTR-2

CALIBRATION INSTRUCTIONS

The RTR-2 is a multi-range Pt-100 transmitter.

Six DIP-Switches are located behind the red sliding cover for coarse ranging. The cover should gently slide inward.

Zero & Span potentiometers provide the final fine tuning.

Calibration

To calibrate the RTR-2, the limits must be defined. T min is the temperature at which the transmitter output current is 4mA.

T max is the temperature at which the transmitter output current is 20mA. The difference between T max and T min is defined as the "Span" of the transmitter.

An array of six DIP-Switches controls the transmitter coarse range. Set switches 1 to 3 control the Zero (T min), and set switches 4 to 6 control the Span.

- Connect a Pt-100 calibrator (DIN 43760 α= 0.00385) between terminal #6 and #4 and short-circuit terminals #4 and #3

- Set the calibrator to T min

- Adjust the Zero potentiometer to obtain an output current of 4.000mA.

- Set the calibrator to T max

- Adjust the Span potentiometer to 20.000mA

- Repeat until satisfactory results are achieved

Note: The calibrator can be replaced by accurate resistor decade

Connection Diagram