

## Calibration Procedure: MIC1460/MIC1462

Note: Calibration should be attempted only on instruments on which calibration errors have been encountered. (See calibration check).

### Equipment Required:

- 1) Input source with accuracy better than +/- 0.05% of reading.
  - a. Thermocouple: T/C simulator, K type with compensated leads.
  - b. DC:
    - i. 0 to 50 mV **OR**
    - ii. 0 to 10 V **OR**
    - iii. 0 to 20 mA
  - c. RTD: Decade resistance box with 3 wire output.
- 2) MIC ¼ DIN case wired for appropriate input voltage supply.

### Procedure:

- 1) Before applying power, position the input conditioning jumpers on the CPU circuit board as appropriate for the model and input, see figure B3, page 75.
- 2) Connect the appropriate input from the input source. Set the input source as follows

Input Type	Input Source
a) DC0-50 mV	a) 50 mVDC
b) DC 0-10 V	b) 10 VDC
c) DC 0-20 mA	c) 20 mADC
d) RTD	d) 200 ohms
e) T/C	e) 0° C type K
- 3) Apply power to the instrument and leave powered for five (5) minutes for RTD and DC inputs **OR** thirty (30) minutes for T/C inputs, then power down.
- 4) Apply power to the instrument and within 30 seconds of power up, press and hold the **DOWN** and **SCROLL** keys simultaneously for about 5 seconds. The upper display will show **IP\_1** and the lower display will show **CAL**.
- 5) Use the UP/DOWN keys as required to change the input type number as required:

Input Type	Input Source
a) DC 0-50 mV	a) 50 mVDC
b) DC 0-10 V	b) 10 VDC
c) DC 0-20 mA	c) 20 mADC
d) RTD	d) 200 ohms
e) T/C	e) 0° C type K

Note: If required, only one input type may be calibrated. Exception: If it is required to calibrate the thermocouple input, it is necessary to calibrate the DC 0-50 mV input first.

- 6) Press the **MODE** key, upper display will show ----.
- 7) After a few seconds, the upper display will show **IP\_x**, where 'x' is the CAL INPUT number if the calibration was successful. If the upper display shows **FAIL**, the calibration was not successful – check the jumper positions, wiring, CAL INPUT number and try again.
- 8) To calibrate all inputs, repeat steps 2 through 7 for each of the other input types.
- 9) The calibration procedure is now complete. Disconnect power and remove input connections.

### CALIBRATION CHECK

- 1) Set the instrument to the required configuration.
- 2) Power up the instrument and allow to stabilize for at least 5 minutes (RTD and DC inputs) or 30 minutes for T/C input.