

## Connecting and Configuring a Calex Electronics two-wire 4-20 mA output sensor with an ATR121AD Controller

### Connecting the controller:

1. Attach power supply wires:
  - to pin 1
  - + to pin 2
2. Attach sensor wires:
  - PWR + (Red) to pin 9
  - PWR - (Black) to pin 12
  - Screen to pin 11 (this is optional)
3. Turn on the power. The display flashes "E-5".

### Entering configuration mode:

4. Press and hold FNC for 5 seconds until the display shows "000".
5. Enter the password. Default password is "123":
  - Press UP to increase first digit to "1". Press SET.
  - Press UP twice to increase second digit to "2". Press SET.
  - Press UP three times to increase third digit to "3". Press SET.
6. Display shows first configuration parameter "c.ou".

### Inputting the sensor's temperature range:

7. Adjust the configuration parameters:
  - Press UP and DOWN to select a configuration parameter to adjust.
  - Hold SET and press UP and DOWN to change the value.
  - Release SET to store the value.
8. Change the value of parameter "SEn" to "4.20"
  - The controller now recognises the 4-20 mA output of the sensor.

Use the table below to input the temperature range limits:

9. Change the value of "Lo.n" to the lower limit of the sensor's temperature range, in °C
10. Change the value of "Hi.n" to the upper limit of the sensor's temperature range, in °C

Sensor	Lo.n	Hi.n
PCxxxLT-0	-20	100
PCxxxMT-0	0	250
PCxxxHT-0	0	500

11. Press FNC to exit configuration mode. The display now shows the measured temperature.