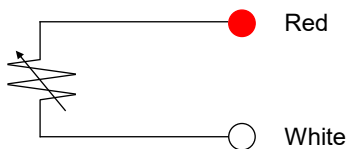


# RTD Wiring Configuration

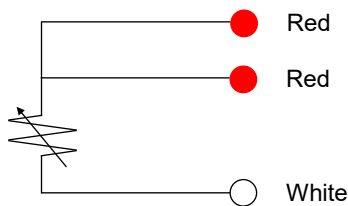
RTD wiring configurations allow the instrumentation and control devices to accurately measure the RTD sensor element resistance. There are three main types of wiring methods used by Aircom and industry that are outlined below. Lead wires are identified with colour coding. Aircom uses the industry standard red and white to identify which lead wires are across the RTD sensing element. It is common to see other colour types in the industry and the same methodology applies.

## 2 Wire RTD



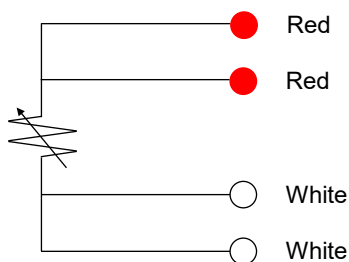
2 wire RTD configurations do not offer a means of compensating out the lead wire resistance. The excess wire resistance will be measured by the instrument, producing a resistance value greater than that of the element.

## 3 Wire RTD



3 wire RTD configurations offer a third wire to compensate out lead wire resistance. All the lead wires in these configurations must have the exact same characteristics to achieve accurate lead wire compensation.

## 4 Wire RTD



4 wire RTD configurations eliminate the need for lead wires to be of exact characteristics. The instrument will pass a very small current through two of the leads and measure a voltage drop across the other two. This allows for the resistance to be determined by ohms law.