

What is TCR mode?

In any material, the internal resistance will change as the temperature changes. This extends to resistors as well. The rate of resistance change based on temperature is referred to as the ***Temperature Coefficient of Resistance (TCR)***. It is indicated in units of ppm/°C and determined from the resistance change from some reference temperature and the change in temperature.

How to set the TCR?

With the TCR (*Temperature Coefficient of Resistance*) function, you can customize your temperature control coils (Ni, Ti, SS) on your own.

When the device is off, press the fire button and “+” button simultaneously for about 5 seconds to enter into the TCR setting menu:

1. Press “+” button to switch between TCR M1, M2 and M3;
2. Press “-” button once first, then set the value with the “-” / “+” buttons;
3. Long press the fire button or leave it for a few seconds to confirm.

TCR value range for normal temperature control coils:

Material	TCR Value Range
Nickel	600-700
NiFe	300-400
Titanium	300-400
SS (303, 304, 316, 317)	80-200

Note: 1. The above TCR value is 10^5 multiplied of its actual value.

2. Value range is among 1-1000.