

What is TCR?

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**. It is indicated in units of ppm/°C and determined from the resistance change from some reference temperature and the change in temperature.

TCR for eVic-VTC Mini

It is the first time that we applied TCR to the new Firmware V3.0 for eVic-VTC Mini. You have three options (M1, M2, M3) to customize the TCR regarding to the material.

How to set TCR ?

In power-off condition, press the fire button and the right regulator simultaneously for around 5 seconds, then you enter into the TCR set menu:

1. Press the right or left regulator to choose between TCR M1, M2 or M3;
2. Then press the fire button to select the parameter;
3. Press the regulator to increase or decrease the parameter;
4. Long press the fire button or leave it for about 10 seconds to confirm.



Here's the **TCR Value Range** for your reference as follows:

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

Note: 1. The TCR value in the sheet is 10^5 multiplied of the actual TCR.

2. The TCR value range is 1-1000.

How to use TCR?

After finishing the TCR setting, press the fire button 5 times to power on. Then we choose the right TCR mode for certain material.

1. Press the fire button three times, the mode indication will flash.
2. Press the right regulator to enter into TCR mode.
3. While the indication is still flashing, press the left regulator and the sub-menu items (M1, M2, M3) will flash.
4. Then press the right regulator to choose modes among M1, M2 and M3.
5. Press the fire button to confirm and you're ready to use.