# DC 12V 4-Wire PWM Fan Temperature Controller

## 1.Description:

It is a DC 12V 4-Wire PWM Fan Temperature Controller. 3Bit red LED digital display screen shows temperature and speed which can be used for Host box, CPU,Server host, etc.

## 2.Features:

1>.4-Wire Fan Dedicated Controller
2>.100% PWM Speed Control
3>.Support Reverse Time Sequence Fan
4>.Support 3A Fan Low Temperature Shutdown
5>.Temperature and Speed Dual Display
5>.Power-OFF Parameter Memory Function

## 3.Parameters:

1>.Working Voltage: DC 12V
2>.Working Current: <40mA at 12V
3>.Drive Current: <3.5A
4>.PWM Range: 1%~100% (+/-0.5% )
5>.PWM Frequency: 25KHz (+/-1KHz)
6>.PWM Amplitude: 5V at unloaded
7>.Measure Temperature: -9.9C~99.9C Celsius Degree
8>.Temperature Error : +/-1.2C at 0C~50C and +/-2C at others
9>.Temperature Sensor: NTC 10K B=3590 Sensor
10>.Sensor Length : 40cm
11>.Module Size:60*29*21mm

## 4.Button Set Method:

1>. **' + ' Button :** Switch display parameters at Normal Running State; Increase parameter value at Parameter Set State. Keep press to increase parameter values quickly and continuously at Parameter Set State.

2>. **' - ' Button :** Switch display parameters at Normal Running State; Decrease parameter value at Parameter Set Mode. Keep press to decrease parameter values quickly and continuously at Parameter Set State.

3>. **' OK ' Button :**

3.1>.At Normal Running State: Short press enter into Set PWM Parameter State. Then press ' + ' and ' - ' buttons to change parameter value and set range is 1% to 100%. Short press again to save value and exit.

3.2>.At Normal Running State: Keep press 2 second enter into Set Temperature State. Then short press ' OK ' button to switch parameters ' L** ', ' H** ', ' C** '. Press ' + ' and ' - ' buttons to change parameter value. Short press ' OK ' button again to save value and exit.

3.3>.Set PWM OUT Time Sequence: Keep press ' OK ' button and then turn ON working power supply, then enter into set mode for PWM OUT Time Sequence. Press ' + ' and ' - ' buttons to switch value P1 or P-1. Short press ' OK ' button again to save value and exit.

3.3.1>. P1 : Forward Output, Default Normal PWM OUT Time Sequence.

3.3.2>. P-1: Reverse PWM OUT Time Sequence.

## 5.Temperature Parameter Set:

1>. ' L** ' **Accelerated Temperature**: Set range is 5~94. PWM output increases with temperature rise when the measured temperature higher than' L** '.

2>. ' H** ' **Full Speed Temperature**: Set range is 10~99. PWM keep output 100% and fan keeps running at full speed.

3>. ' C** ' **Shutdown Temperature**:

3.1>.Set range is 0~92.

3.2>.Enable this function if ' C** ' >0;

3.3>.Disable this function if this parameter is set to ' C00 '. Fan keep work and PWM keep output.

3.4>.Turn OFF fan( both fan power and PWM signal are turn off) ;

3.5.>.At Shutdown State: Fan restart and speed changes with temperature if when the measured temperature higher than ' L** ' Accelerated Temperature.

4>. Note-1: The difference between ‘ L** ’ Accelerated Temperature and ‘ H** ’ Full Speed Temperature cannot be less than 5.

5>. Note-2: The difference between ‘ L** ’ Accelerated Temperature and ‘ C** ’ Shutdown Temperature cannot be less than 2.

6>. Note-3: if the difference does not meet the requirements when setting parameters, the program will automatically adjust the other two parameters.

## 6.Application:

1>.Industrial Automation Control

2>.CNC machine

3>.Host box, CPU,Server host

4>.Speed governor

## 7.Package:

1>.1pcs DC 12V 4-Wire PWM Fan Temperature Controller

2>.1pcs 40cm NTC 10K B=3590 Temperature Sensor