

Icstation DC 12V Programmable Temperature Controller

Icstation mini digital programmable thermostat temperature controller with waterproof NTC (10k 0.5%) temperature sensor probe and -50°C to 110°C (-58°F to 230°F) measuring range. On-board 3 digit LED display the set temperature and current temperature with settable function. On-board DC 12V one channel relay control the power on/off, one key to switch the $^{\circ}\text{C}$ and $^{\circ}\text{F}$ temperature display ideal for DIY temperature control system use. Widely used at smart home, industrial control, automatic irrigation, indoor ventilation and protection equipment.

Specifications:

Measuring Range: -50°C to 110°C (-58°F to 230°F)

Measuring Accuracy: $\pm 0.1^{\circ}\text{C}$

Controlling Accuracy: 0.1°C

Backlash Precision: 0.1°C

Refresh Frequency: 0.5s

High Temperature Protection: 0 to 110°C (32°F - 230°F)

Temperature Sensor Type: 10K0.5% NTC

Working Temperature: -10°C to 60°C (14°F to 140°F)

Compatible Load: 5A/15A 220VAC, 20A 14VDC

Power Supply: DC12V 200mA

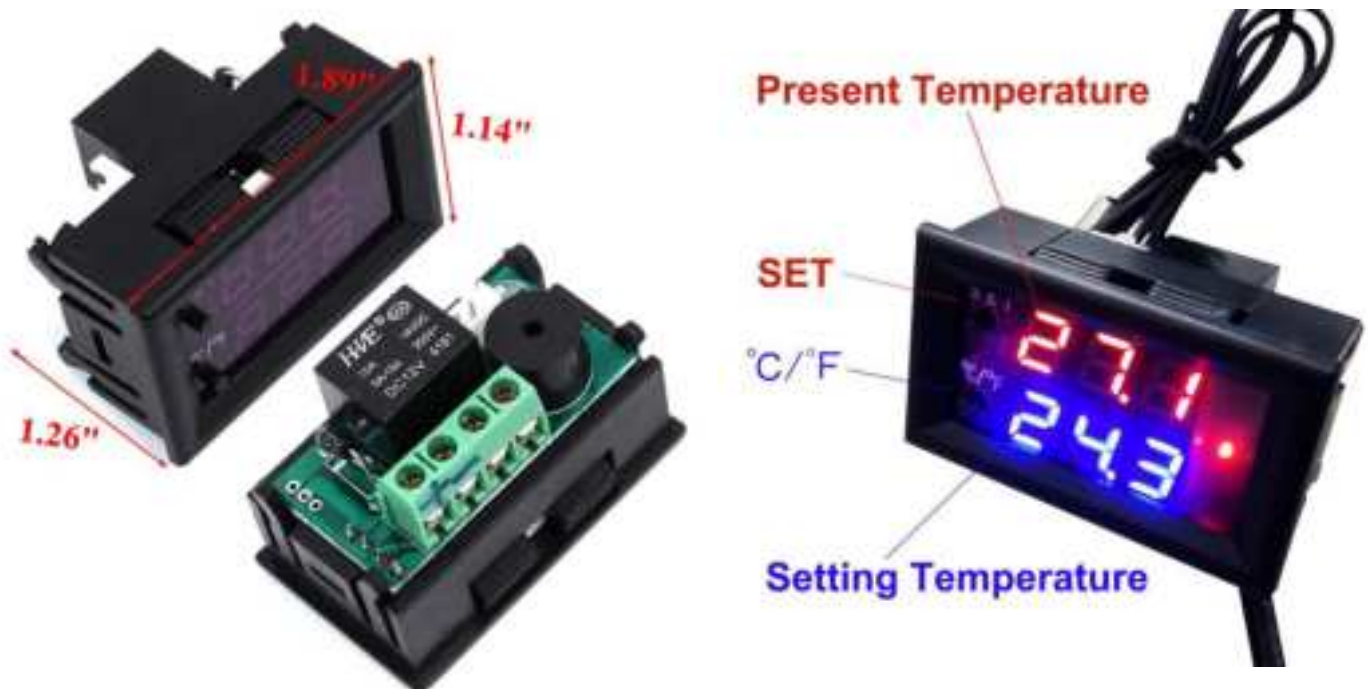
Power Consumption: $\leq 35\text{mA}$ (static), $\leq 65\text{mA}$ (relay close)

Module Size: 48 X 29 X 32mm/1.89 X 1.14 X 1.26inch (L*W*H)

Cable Length: 30cm/12inch, Probe: 2cm/0

Package Included:

1X Mini Digital Thermostat Temperature Controller Switch





Instruction:

1. Temperature setting: Press the SET then the LED will flash and then you can set the temperature with SET(+) and C/F(-) buttons. Wait for 3s, the module will automatically save the parameter and exit.
2. Indicator: It will turn on when the relay close.
3. Display: LL means the sensor is in open circuit status; HH means the the temperature is exceed the module measuring range; "- -" means the module is in the high temperature protection status.

Code	Description	Setting Range	Default Setting
P0	Heating/Cooling	H/C	C
P1	Return Difference	0.1-30	2.0
P2	Set maximum limit	+110	110
P3	Set minimum limit	-50	-50
P4	Temperature Correction	-15~15	0
P5	Delay Start	0-10	0
P6	High Temperature Alarm	~50~110	OFF
P7	C/F	CS-FH	CS
P8	Reset	ON-OFF	OFF

If you need to control the refrigeration equipment:

- 1.Press SET for 5 seconds then enter setting manual
- 2.Press SET(+)or C/F(-)to switch from P0 to P8 setting.
- 3.Press SET and C/F at the same time to enter P0 setting. Select "C" in P0 setting by pressing the 2 buttons at the same time.
- 4.Press SET and then the blue number will flash. Use SET(+)and C/F(-)to set the stop cooling temperature. Wait for 3 seconds and it will automatically confirm the setting.
- 5.Press SET for 5 seconds to enter setting manual and then switch to P1. Press SET and C/F at the same time to enter P1 setting. The number starts flashing.
- 6.Set the return difference by SET(+)and C/F(-),and then wait for 3 seconds to confirm setting.

Note: the max return difference is 30.

For Example

You need a device start cooling at 190F and turn off at 160F.

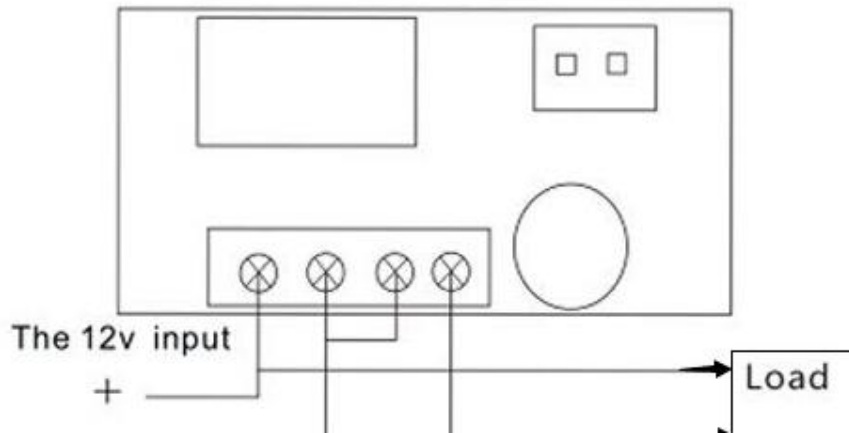
- 1.Enter P0 setting and choose "C".
- 2.Press SET and set the stop cooling temperature as 160.
- 3.Enter P1 and set it as 30. (Because $190-160=30$)

Note: the max return difference is 30



Diagram1: share the same power supply

Temperature control and load the 12v cases wiring way



Load and temperature control different power wiring diagram

