

# DWH7016V

Before wiring your controller to the power supply, please check its voltage, printed on its label. You need to consider this voltage on all parts of the manual too.

## ① Specification and size:

Product size: 75L x 34.5W x 85D (mm)

Mounting size: 71L x 29W (mm)

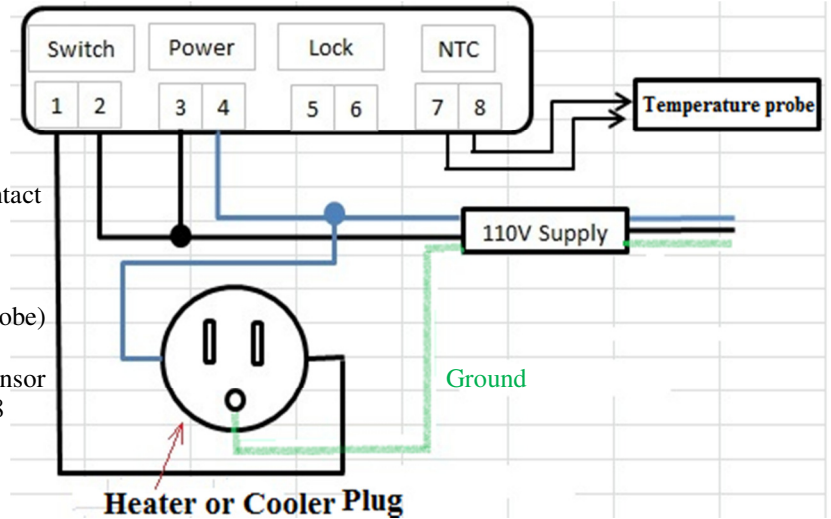
## ② wiring diagram:

Terminals 1 & 2: (normally open) switch output relay contact (Max 10amp)

Terminals 3 & 4: connect the power supply

Terminals 5 & 6: After a short circuit can lock thermostat

Terminals 7 & 8: temperature sensor connection (NTC Probe)



Output Switch	power supply	Lock thermostat	NTC sensor
1 2	3 4	5 6	7 8

## ③ Technical Parameters:

Temperature measurement range:  $-50\text{ }^{\circ}\text{C} \sim 110\text{ }^{\circ}\text{C}$

Temperature measurement error:  $\pm 0.5\text{ }^{\circ}\text{C}$

Control accuracy:  $1\text{ }^{\circ}\text{C}$

Maximum power consumption: 2W

Resolution:  $1\text{ }^{\circ}\text{C}$

Sensor Type: NTC (10K/3435)

Storage temperature:  $-10\text{ }^{\circ}\text{C} \sim 60\text{ }^{\circ}\text{C}$

Relay contact current: Max10A/110V or 10A/12V or5A/220V

Operating temperature:  $0\text{ }^{\circ}\text{C} \sim 50\text{ }^{\circ}\text{C}$

## ④ Button Description:

1. RST: press the RST key to switch on and press the RST key for three seconds and hold to switch off.

2. SET:

A: press the SET key once to enter the control temperature setting, press ▲ or ▼

Keys to adjust your set point temperature press SET button again to exit setting mode.

B: press and hold SET button for three seconds to enter the system menu settings, press ▲ or ▼

Button to select the menu, Press the SET button once to enter the appropriate parameter settings, press ▲ or ▼ Button to modify the parameters. After adjustment, you can exit by RST key, or wait for 5 seconds.

3. ▲: increase key

4. ▼: Down key

## ⑤ Operating Instructions:

### LED Status Description:

The left side of the display lights as working lights WORK use flash to indicate cooling or heating time delay, LED lit Said cooling or heating works.

The left side of the display lights is the set light. It will on when you use SET.

### ◆ Cooling, Heating function:

Cooling Mode: When the measured temperature is higher than or equal to the set value + hysteresis, the relay to start the output and when it is less than the set value, the relay close the output.

Heating mode: When the measured temperature is higher than or equal to the set value, the relay turn off the output and When it is less than the set value - hysteresis, the relay starts output.

### ◆ Cooling heating mode:

Press "SET" button and hold more than 3 seconds to enter the menu display, the screen appears "HC" code, press the "SET" key to display Mode, press the "▲" or "▼" "Adjusting the display, C said cooling mode; H said heating mode.

### ◆ Hysteresis function:

The controller can open a minimum and maximum interval different set value. It is between  $1\text{ }^{\circ}\text{C}$ , Up to  $15\text{ }^{\circ}\text{C}$ .

### ◆ Hysteresis settings:

Press "SET" button and hold more than 3 seconds to enter the menu display, with "▲" or "▼"

"Key transferred to the screen appears" d ", press the "SET" key to display the hysteresis set value, press "▲" or "▼"

"Keys to adjust the parameters between 1-15.

◆ **Temperature correction:**

You can calibrate your temperature with this function .Correction value can be positive, negative, and 0.

◆ **Temperature calibration settings:**

Press "SET" button and hold more than 3 seconds to enter the menu display, with "▲" or "▼"

"Key transferred to the screen appears" CA " Code, press the "SET" key to display the temperature correction settings, press "▲" or "▼"Keys to adjust the parameters.

◆ **Time control function:**

Press the RST key to turn on the controller, so the thermostat starts in a set period of time for thermostatic control. Timer starts counting down as soon as the controller turns ON and when the time reaches to 0, the controller will turn off the output. If you set the PT parameter on 0:00, the time controlling function is off and it works like a thermostat without time control function.

◆ **Time control setting:**

Press "SET" button and hold more than 3 seconds to enter the menu display, with "▲" or "▼" Key transferred to the screen appears" PT " Code, press the "SET" key to display the time control setting value, press "▲" or "▼"Keys to adjust the parameters.

◆ **Upper and lower functions:**

HS and LS control setting are the temperature limit set point range. The factory default setting for LS is -50 and for HS is 110

◆ **Upper and lower limit settings:**

Press "SET" button and hold more than 3 seconds to enter the menu display, with "▲" or "▼" Key transferred to the screen appears" HS " Or "LS" code, press the "SET" button to display the upper or lower limit, press "▲" or "▼"Buttons to adjust Parameters.

◆ **Display Mode function:**

Display temperature thermostat can be set to run, or time, or temperature and time are displayed alternately, PD 1. Shows the temperature, PD 2:00 display time, PD 3, the temperature and time are displayed alternately.

◆ **Display Mode set:**

Press the "SET" button and hold more than 3 seconds to enter the menu display, with "▲" or "▼" Button transferred to the screen appears" PD " Code, press "SET" button to display the the delay protection settings, press "▲" or "▼"The key to adjust the parameters.

◆ **Menu code selection :**

Symbol	Details	Setting range	Factory settings	Units
HC	Heating / cooling	H / C	H	
pd	Display Mode	1 to 3	1:Temperature 2:Time 3: Temperature + Time	
PT	Time Control value	0 ~ 999	3	Minutes
CA	Temperature Calibration	-5 To +5	0	°C
HS	Set a limit on the maximum	-50 ~ 110	110	°C
LS	Set limits on the minimum	-50 ~ 110	-50	°C
d	Different set value	1 to 15	1	°C

⑥ **Fault tips :**

- 1) When the sensor is disconnected, the display shows ---
- 2) When the sensor detects the temperature is below -50 degrees, the display shows the LLL
- 3) When the sensor detects a temperature higher than 110 degrees, the display shows HHH

⑦ **Caution :**

- ◆ Maximum cooling, heating load must not exceed the output relay contact capacity (110v/9Amp) , it may damage and cause a fire .
- ◆ Check the wiring diagram before wiring .Wrong wiring will damage the controller.
- ◆ Turn off power supply when you are wiring relays, sensors, .. Otherwise it will damage the machine.

**NTC Sensor**

- **Measurement range: -50 to 110 °C**
- **Cable length (L): 10 ft (3m)**
- **Sensor type: Negative Temperature Coefficient sensor**