

Single key Function

1. Heating shortly

Press "heat" key to shut/open the "heating" function manually. It could press "heat" to shut "heating" function if it is heating and shield "constant heating" function for 30 minutes.

2. Constant heating

Press "heat" key for 3 seconds could shut/open "constant heating" function.

3. Manual circulation

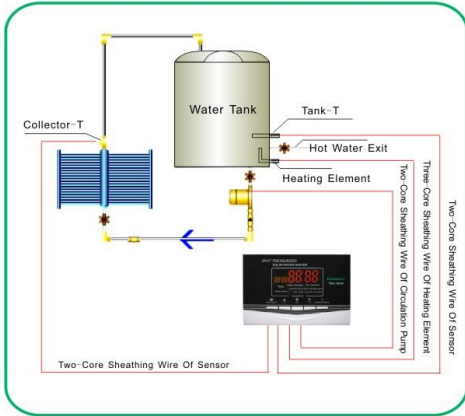
Press "circulation" key to enter into circulation working time(1-30minutes) setting, then press "+" "-" could adjust the working time, after adjust it then automatically exit and start temperature keeping, at last it will shut the temperature preservation ribbon automatically after the temperature keeping is over.

4. Temperature difference circulation

Press "circulation" key for 3 seconds could shut/open the function of "temperature difference circulation".

5. Parameter reset

Press "set" key for 3 seconds, after hearing "di", the whole screen is blight to recover normal indication, then all the parameters in the controller to be factory setting.



**TNC-1
SOLAR WATER
HEATER CONTROLLER**

Key Functions

- Power on self-test
- Indication of water temperature
- Heating up-limited
- Heating bottom-limited
- Constant heating
- Heating shortly
- Temperature difference circulation
- Manual circulation
- Parameter reset

Dear users:

Thanks for your appreciation to our split controller. Solar controller TNC-1 adopts the newest single-chip and professional design. Simple installation, clear operation and stable working are the advantages. It has the function of three times of timing heating, (precision is minute), constant heating (temperature for up and bottom-limited could be set), manual heating, temperature difference circulation (temperature difference for up and bottom-limited could be set), manual circulation, leakage preservation, fault-testing, power-off memory and so on.

1. It shows fashion style with black mirror appearance
2. Well-quality and stable working

Major Technical Indications

1. Power supply: 220VAC Power consumption: <5W
2. Temperature measuring precision: ±2℃
3. Temperature measuring scope: 0-99℃
4. Power of controllible circulation pump: <500W
5. Power of controllible electric heating: <1500W Optional: 3000W
6. Action current of electric leakage≤10ma/0.1S

Key Functions

1.Power on self-test

A beep at start-up indicates the machine stays in a normal condition

2.Indication of water temperature

Real water temperature inside the water tank and solar collector is shown at the same time

3.Time

Display the time at any time

4.Heating up-limited

It can set the up-limited temperature 30℃-80℃ (it means off the heating automatically when manual or constant heating to up the temperature)

5.Heating bottom-limited

It can set the bottom-limited temperature 30℃-80℃ (it means open the heating automatically when the temperature declines to the line at the basis of starting constant heating)

6.Temperature difference up-limited

It can set temperature of up-limited at 5℃-60℃

7.Temperature difference bottom-limited

It can set temperature of bottom-limited at 3℃-60℃

8.Timing heating

You could set three times of the function "timing heating" everyday, the time could be precise minute, the temperature scope can be set at 30℃-80℃. Just set the time for "00" ±

9.Constant heating

After starting the function of "nstant heating" ±

10.Heating shortly

Be able to open or off the "heating" function manually

11. Temperature difference circulation

When the temperature difference between collector and tank is higher than up-limited temperature difference, starting collector circulation; or it will off the collector circulation.

12.Manual circulation

It could set the circulation, after starting 1-99 minutes, it would be shut automatically.

13.Parameter reset

It is possible to reset all the parameter to be factory setting.

Instructions on Usage

Press "Set" key to enter into parameters setting situation

The first screen

"hour" blinks, "minute" "timing heating 1" "heating temperature" long-time blinks, at the time please press "+" "-" key to set the first time heating time(hour); press "set" key again, "minute" blinks, "hour" "timing heating 1" "heating temperature" always blink, then press "+" "-" key to set the first time heating (minute); press "set" key again, "heating temperature" blinks, "hour" "minute" "timing heating 1" long-time blinks, next step press "+" "-" key to set the first time heating temperature (after finish it, press "set" key again to enter into the second screen)

The second screen

"hour" blinks, "minute" "timing heating 2" "heating temperature" long-time blinks, at the time to press "+" "-" key to set the second timing heating(hour); press "set" key, "minute" blinks, "hour" "timing heating 2" "heating temperature long-time blinks, then press "+" "-" key to set the second timing heating (minute); press "set" key again, "heating temperature" blinks, "hour" "minute" "timing heating 2" long-time blinks, next to press "+" "-" key to set the second heating temperature(after finish it, press "set" key again to enter into the third screen)

The third screen

"hour" blinks, "minute" "timing heating 3" "heating temperature" long-time blinks, at the time to press "+" "-" key to set the third timing heating(hour); press "set" key again, "minute" blinks, "hour" "timing heating 3" "heating temperature long-time blinks, then press "+" "-" key to set the third timing heating (minute); press "set" key again, "heating temperature" blinks, "hour" "minute" "timing heating 3" long-time blinks, next to press "+" "-" key to set the third heating temperature(after finish it, press "set" key again to enter into the fourth screen)

The fourth screen

"hour" blinks, "minute" "timing heating 4" "heating temperature" long-time blinks, at the time to press "+" "-" key to set the fourth timing heating(hour); press "set" key again, "minute" blinks, "hour" "timing heating 4" "heating temperature long-time blinks, then press "+" "-" key to set the fourth timing heating (minute); press "set" key again, "heating temperature" blinks, "hour" "minute" "timing heating 4" long-time blinks, next to press "+" "-" key to set the fourth heating temperature(after finish it, press "set" key again to enter into the fifth screen)

The fifth screen

"heating up-limited temperature" blinks, "constant heating" "up-limited" long-time blinks, at the time to press "+" "-" key to set the number of heating up-limited temperature; press "set" key then "heating bottom-limited temperature" blinks, "constant heating" "bottom-limited" long-time blinks, then press "+" "-" key to set the number of heating bottom-limited temperature (after finish it, press "set" key again to enter into the sixth screen)

The sixth screen

"the temperature difference up-limited-temperature" blinks, "t-difference circulation" and "up-limited" long-time blink, then press "+" "-" key to set the number of t-difference up-limited; press "set" again, "the temperature difference bottom-limited temperature" blinks, "t-difference circulation" and "bottom-limited" long time blink, then press "+" "-" key to set the number of temperature preservation bottom-limited. (After finish it, press "set" key to enter into seventh screen)

The seventh screen

"Hour" blinks, "minute" long-time blink, at the time press "+" "-" key to set the time (hours); next to press