

SET  
HEAT  
SET  
HYS  
100  
SET  
CUT  
020  
SET  
OUT  
000  
SET  
T-H  
1000  
SET  
BSL  
001  
SET  
C-F  
C  
SET  
LCV  
000

Control mode setting,  
HEAT: heating COOL: cooling.

Control hysteresis setting, range: -90 ~100,  
(not available when P ≠ OFF)

Output control mode setting, suggest:  
RELAY=020, SSR/SCR=001, 4-20mA=000.

Low analog output setting,  
(when analog is active)

High analog output setting,  
(when analog is active)

Only for 4-20mA  
P, d-PID control {P}11=PV 4-20mA transmit

Temperature unit setting,  
C: Celsius degree, F: Fahrenheit degree.

Parameter lock setting,  
LoK=010 means parameters can be read only,  
LoK≠010 means parameters can be read and write.

In the non-autotune state, press and hold  $\Delta$  /  $\nabla$  key for more than 5 seconds to enter/quit the under menu: (Normally the program will refresh the value of the parameter by itself, the user does not need to make modifications.)

SET  
LSP  
0.00  
SET

Low display value setting,  
it is adjustable according to the input signal.

SET  
USP  
1.200  
SET

High display value setting,  
it is adjustable according to the input signal.

SET  
HYS1  
1.0  
SET

AL1 hysteresis setting, range -90 ~100,  
The factory setting 1.0

SET  
HYS2  
1.0  
SET

AL2 hysteresis setting, range -90 ~100,  
The factory setting 1.0

SET  
dP  
1  
SET

Decimal point setting:  
0: No decimal 1: One decimal

SET  
SCW  
015  
SET

Password setting,  
The factory setting 015.

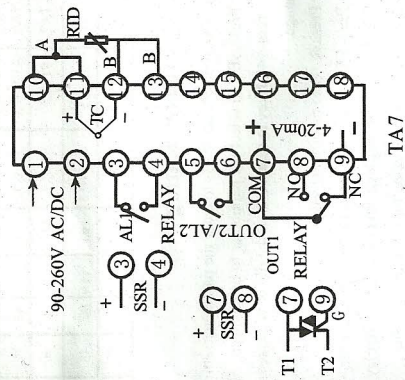
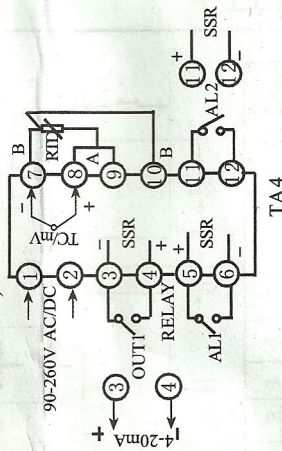
## Note:

1. When the user operates the instrument for the first time, please operate according to the instructions of this manual. Set the instrument to autotune. If running conditions do not change (i.e. Running the same equipment), there's no need to autotune again since the instrument records the PID parameters. When the instrument is used for large capacity heating equipment, the user should set the autotuning value 5-10% lower than the normal control value in order to decrease the exceeded tuning caused by the control.

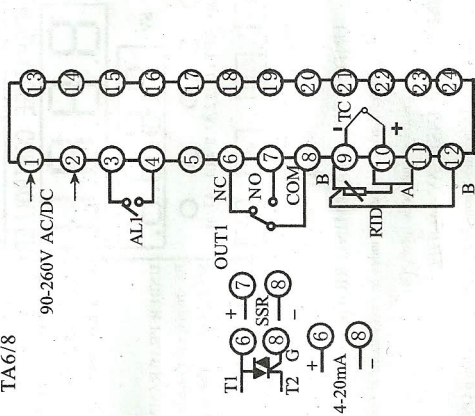
2. Normally, the control cycle of the heating equipment should be 10-20 seconds. For large capacity heating equipment, the value should be 30-120 seconds in order to extend the life of relay. For non-contact output, eg. SSR, it should be 1-3 seconds.

## Terminal configurations

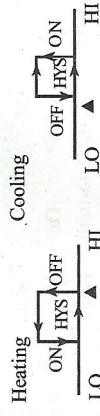
(Note: If any changes, please refer to the diagram labeling on the instrument.)



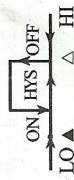
TA6/8



ON/OFF control:



0: Deviation HI alarm



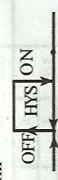
1: Deviation LO alarm



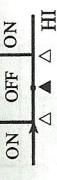
2: Absolute value HI alarm



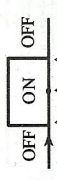
3: Absolute value LO alarm



4: Section outside alarm



5: Section inside alarm

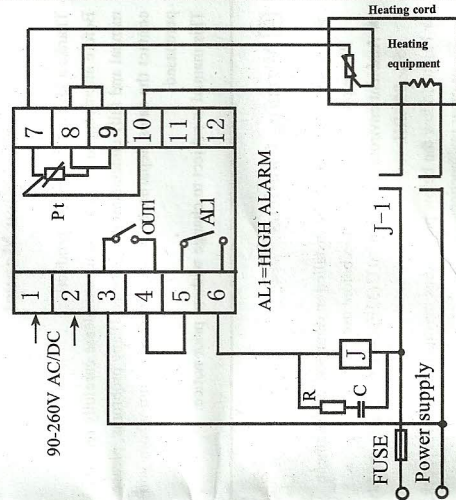


Note:

The factory setting for all hysteresis value is 1.0.

## Application examples

### 1. Relay output control (for TA4-RNR)



## Troubleshooting

- ① No Display: Check all the connection and wiring, especially wiring for power supply. Beside, make sure the output terminals are not shorted by large current.
- ② Incorrect Display:
  - ◇ Check that the input signal conforms with the selected symbol.
  - ◇ For TC input use the related cable and TC probe; For RTD input use a low impedance cable and RTD probe. The 3 wires should be of the same length.
  - ◇ In case of malfunctioned sensor or instrument put the sensor into ice or boiling water separately to check; both sensor and meter are ok if the instrument displays about 0 or 100 within the allowable error.
  - ◇ The decreasing display of the instrument means that TC wiring is connected on the contrary.
  - ◇ If it belongs to none of the above cases modify the parameter PVF.
- ③ Incorrect Control:
  - ◇ If the instrument is taking a longer time than normal to reach the temperature it is set at and the outside system is running correctly, the parameters may be setted inappropriate, then you should turn on the autotune function.
  - ◇ If the instrument lost control, check that the wiring of the control is correct. Or the components may be damaged if the external load is shorted/broken/wrong connected.
- ④ Display malfunction:
  - ◇ "UUUU": The input exceeds USP setting, or TC breaks.
  - ◇ "LLLL": The input is lower than LSP setting, or wrong signal wiring.