

# TDS21-AC TOUCH SCREEN THERMOSTAT



## I. Product Summary:

TDS21-AC Series thermostats are designed to control the fans and valves in air conditioner applications via comparison of the room temperature and setting temperature as reaching the aim of comfort and saving energy.

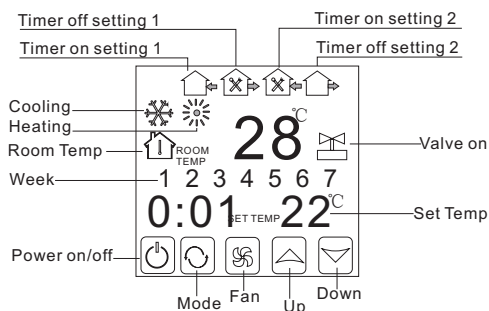
## II. Technical Parameter:

Power Supply	AC200~240V, 50/60HZ
Current Load	3A~5A
Power Consumption	<0.5W
External Material	PC+ABS (flame retardant)
Sensing Element	NTC
Set Temp. Range	10°C - 40°C
Accuracy	±1°C
Dimension	86x86x13.3mm
Ambient Temp.	0-45°C, 5-95%RH(Non-condensing)
Storage Temp.	-5~55°C
Installation Box	80x80mm

## III. Main Functions and Characteristics

1. Modern design similar as a cell phone.
2. Large glass screen display with White/Blue backlight.
3. 2-pipe and 4-pipe for choose.
4. 3 Fan speed + auto timer switch for daily or week.
5. Timer on/off function for daily or week.
6. Room temp calibration function.
7. Selectable 80mmx80mm hidden box.
8. Precise comfort control keeps temperature within 1°C of the level you set.

## IV. User Interface Explanation



## V. Model Definition

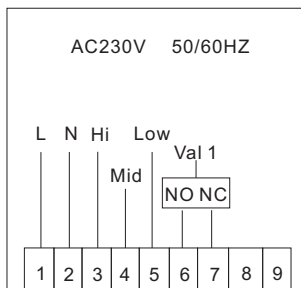
AC 2: Two pipe, for air conditioning  
AC 4: Four pipe, for air conditioning

For example: TDS21-AC2  
TDS21-AC4

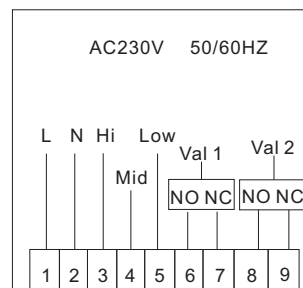
## VI. Model Spec

Model	Spec	Fan Speed	Timer Switch	Fan coil controllable
TDS21-AC2	2 Pipe	3 Fan speed+Auto	✓	✓
TDS21-AC4	4 Pipe	3 Fan speed+Auto	✓	

## VII. Wiring Diagram



2 pipe



4 pipe

## VIII. Operation Instruction

### 1. Setting Power on/off

Press to turn on/off the power.

### 2. Setting Temperature

Press to set the temperature.

### 3. Setting the System Mode

Press to select heating, cooling or ventilation. Factory Default is ventilation.

### 4. Setting the Fan Speed

Press to select the fan speed.

is Low speed(Factory default);

is Mid speed;

is High speed;

is Auto speed.

In auto mode, the fan will run according to the comparison of room temperature and set temperature.

### 5. Setting the Real Time.

Press and hold for 3 sec., hh will flash in the position of hh: mm.

Press to adjust the current hour.

Press , mm will flash in the position of hh: mm.

Press to adjust the current minute.

Press , 1 will flash in the position of week: 1234567.

Press to adjust the current week.

### 6. Setting the Time-on(Regular Boot)

Press for more than 3 seconds, after setting the time, continue to press until and "hh" twinkling. Press to adjust the hours.

After the adjustment of hours, press until the "mm" twinkling, press to adjust the minutes.

After the completion of all adjustments, press to confirm, then does not twinkle, Regular boot setup is complete.

The operation of canceling Regular boot is the same, press to the state of Regular boot, then pressing , the is twinkling, Regular boot has been canceled.

### 7. Setting the Timer off

After the setting of Regular boot, press again, until and "hh" twinkling, press to adjust the hours.



After the adjustment of hours is completed, press until the "mm" twinkling, press to adjust the minutes.

After the completion of all adjustment, press to confirm, then does not twinkling, Off timer setup is completed.

The operation of canceling Off timer is the same, press to the state of Off timer, then pressing , the is twinkling, Off timer has been canceled.

The setting of the third period and forth period are same with the first and second period, the icons are (on, off/into the house, out of the house)

### 8. Setting the Circulation of Timer Switch

After setting the time of timer switch, continue to press the , there will be "LooP", then press , week display area will displays the day of the week, or the transformation of "12345" "123456", or "1234567".

If the screen only displays the day of the week, then the timer switch setting is valid only for the day.(= "Execute once" in App interface)

If it displays "12345", then the timer switch is valid from Monday ~ Friday, and Saturday and Sunday will be invalid.



If it displays "123456", then the timer switch is valid from Monday ~Saturday, and Sunday will be invalid.

If it displays "1234567", then the timer switch is valid from Monday ~ Sunday.

### 9. Advanced Setting Mode

#### Temperature Adjustment



(Attn: Only when your room temperature is different with actual temperature, you do this operation.)

In power-on status, press  about 7 seconds, then "XX X" will display on the bottom of the screen. For Example: "26 5" means temp is 26.5°C then you can press  to modify the temperature.

It will confirm automatically after correct temp twinkling 7 seconds.

#### Fan Coil Controlling Mode Setting(Only for 2 pipe)

(You can select the fan coil In control & Out of control.)

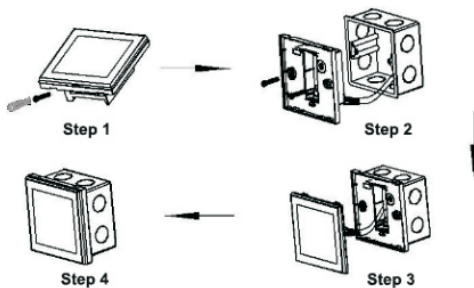
In power-on status, press  about 7 seconds, "XX X" will display on the bottom of the screen, then continue to press  again, "F00" or "F01" will display. Press  to choose "F00" or "F01"

In "F00" mode, when room temperature reaches to the setted temp, the fan coil stops working.  
In "F01" mode, when room temperature reaches to the setted temp, the fan coil goes on working.

## IX. Installation Instruction

1.Connect the line of power and valve into the terminals. Fix the wall plate into the wall box by a screwdriver.

This product is suitable for standard 80\*80mm wall box.



2.Connect the lines with the LCD board.

3.Connect the LCD board into the wall plate.

**NOTICE:** The installation wire should be 1.5-2.5mm<sup>2</sup>.

## X. ATT:

Thank you for buying this product!

Please read this manual for complete instructions on installing and operating your thermostat. If you require further assistance, please feel free to contact us.

### In the box you will find:

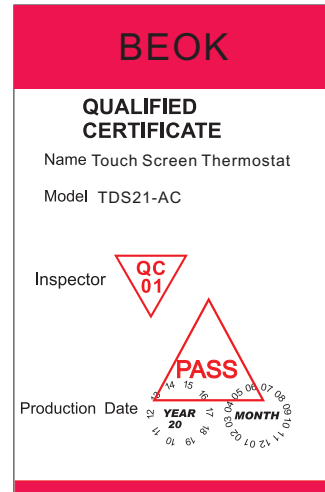
Model	TDS21-AC
Thermostat	✓
User Manual	✓
Screws	✓
Dryer	

### Our Service:

We offer the warranty of 24 months from the sales day.

During the warranty, if it is belong to the quality issue, we will fix or replace them for you by free after test them.

If it is not quality problem or beyond the warranty time, we will charge for the after-sales service.



### Warning:



The symbol means the unit is being installed, it may cause electrical shock hazard during maintaining, so please make sure it is operated by the professional technical worker.

