TDS21 WIFI FAN COIL THERMOSTAT

BEOK CONTROLS

I. Product Summary:

TDS21 WIFI Fan Coil Thermostat is touch screen thermostat with WIFI Function, the thermostats can be controlled by phone App.(IOS and Android phone)

It is designed to control the fans and valves in air conditioner applications via comparison of the room temperature an setting temperature as reaching the aim of comfort and saving energy.
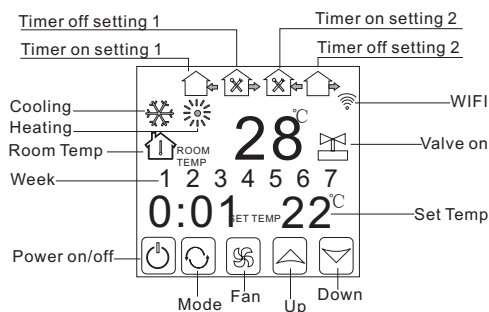
II. Technical Parameter:

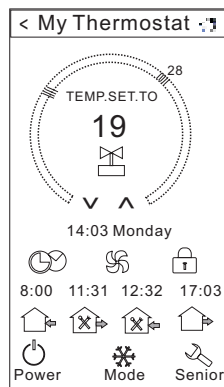|	
Power Supply	AC200~240V 50 ~60Hz
Current Load	3A~5A
Power Consumption	<0.5W
External Material	PC+ABS (flame retardant)
Sensing Element	NTC
Set Temp. Range	10-40℃
Accuracy	±1℃
Dimension	86x86x13.3mm
Ambient Temp.	0-45℃,5-95%RH(Non-condensing)
Storage Temp.	-5~55℃
Timing Error	<1%

III.Main Functions and Characteristics

1. Heating, cooling, ventilation mode.
2. WIFI for Andriod & Apple IOS phone.
3. Large Glass screen display and touch screen type.
4. 2 pipe and 4 pipe for choose.
5. 3 fan speed+Auto.
6. Programmable timing switch function, 4 period a day setting.
7. Temperature compensation when differs from actural temp.
8. Selectable 80mmx80mm European hidden box.
9. Key Lock function.
10.Fan coil in-control and out-of-control adjustable.(only for 2 pipe)

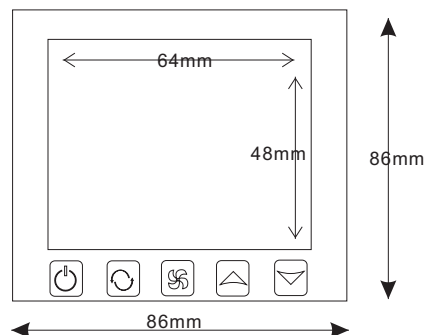## IV. User Interface Explanation(Thermostat Port)

- Timer off setting 1
- Timer on setting 1
- Timer on setting 2
- Timer off setting 2
- Cooling
- Heating
- Room Temp
- Week
- WIFI
- Valve on
- ROOM TEMP **28** ℃
- 1 2 3 4 5 6 7
- **0:01** SET TEMP **22**℃
- Set Temp
- Power on/off
- Mode Fan Up Down

V. User Interface Explanation(Phone Port)

< My Thermostat

28
TEMP.SET.TO
19

14:03 Monday

8:00 11:31 12:32 17:03

Power   Mode   Senior

VI. Model Spec

Model	Current Loading	Program Time switch	Key Lock	Controlled Objects
TDS21WIFI-AC2	3A~5A	✓	✓	2 pipe central air conditioner
TDS21WIFI-AC4	3A~5A	✓	✓	4 pipe Central air conditioner

VII. Dimension

64mm

48mm

86mm

86mm

VIII.Wiring Digram

AC230V   50/60HZ

L N Hi Low
Mid
Val 1
NO NC

1 2 3 4 5 6 7 8 9

2 pipe

AC230V   50/60HZ

L N Hi Low
Mid
Val 1   Val 2
NO NC   NO NC

1 2 3 4 5 6 7 8 9

4 pipe
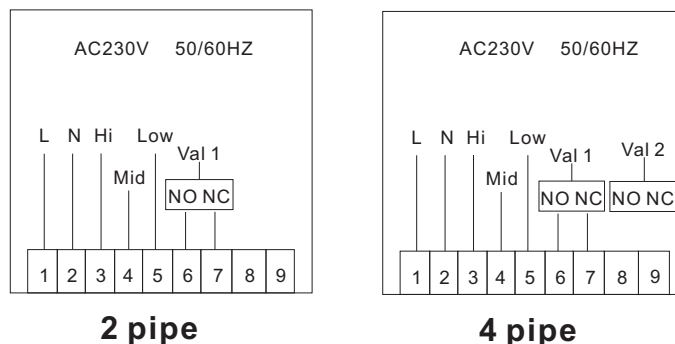
IX. Thermostat Operation Instruction

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 ⟨X⟩ 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 ⟨X⟩ 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 ⟨X⟩ 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 ⟨X⟩⌂ (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

In power-off state, press ⚙ and ⏻ meanwhile, to enter into Advanced Setting. Press ⟳ to switch dIF, Sh1, Sl2, Sh2, Sl2, ADJ, FAN, FrE, LOC, ADD, FAC.

Display code	Function	Parameters	Factory default
dIF	Deadzone/hysteresis	0.5℃ ; 1℃	1℃
SH1	Max temp in cooling	10~40℃	40℃
SL1	Min temp in cooling	10~40℃	10℃
SH2	Max temp in heating	10~40℃	40℃
SL2	Min temp in heating	10~40℃	10℃
AdJ	Temp. Calibration	-5~5℃	0℃
FAN	Fan coil control mode	0:fan coil in-control 1:fan coil out off control	0
FrE	Anti-freeze function	0:Anti-freeze On 1:Anti-freeze Off	0
LOC	Key lock(button lock)	0:Unlock 1:All locked except ⏻ 2:All button locked	0
Pon	Working state memory function	when power fails suddenly, working state memory or not 00: no memory 01: memory	00
FAC	Factory setting	00: Factory reset 08:Just display	08

Advanced Setting in "BEOK AC"App interface is "Senior" ⚒

Touch press ⚒ for 2 second, you will enter into Advanced Setting interface.

X. Phone Port Operation Instruction

1. Install APP on phone

For IOS system: Login in App Store, search " *Beok AC*", you can download it on your iphone. Or scan below code to download:

For Android System: Login in Google Play, search "*Beok AC*", you can download it on your phone. Or scan below code to download:

2. Connection Thermostat with Phone

Thermostat part Setting

POWER OFF STATE ———————— Step 1
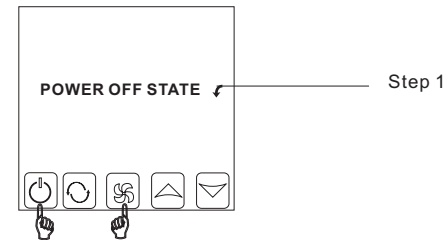
Press and hold ⚙ then press ⏻ button the same time for 2 seconds, then will enter into Advanced Setting.

———————— Step 2
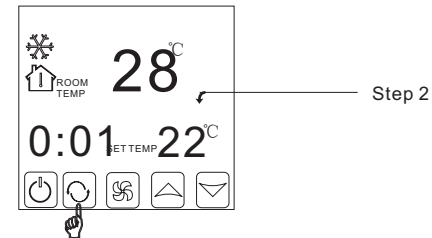
After enter into Advanced Setting, press ⟳ 10 times until "FAC" appears.

fac   08   ———————— Step 3
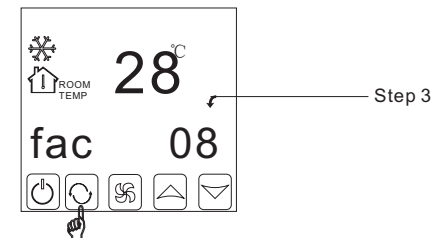
When FAC appears, press △ to change 08 to 10 or 32, make FAC=10 or FAC=32.

fac   10   ———————— Step 4

Then, press ⏻ to power-off state.
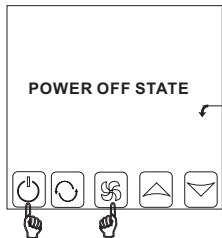
POWER OFF STATE — Step 5

Hold on ⚏ button, then press ⏻ again for 2 seconds, then you can find the WIFI symbol twinkling.

❄ **28**°C ROOM TEMP
0:01 SET TEMP **22**°C
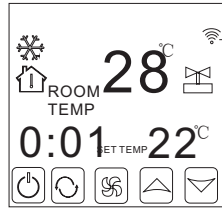
When the wifi symbol 🛜 twinkling quickly and frequently:
Connection can start

When wifi symbol twinkling slowly: It means Off Line

When twinkling Stops: Connection succesfully.

At this time, wifi symbol will be twinkling quickly and frequently.
It means, you can connect thermostat with phone now.

When wifi symbol stop twinkling, it means thermostat is successfully connected with your phone.

Phone part setting

During the WIFI symbol ⚏ twinkling,
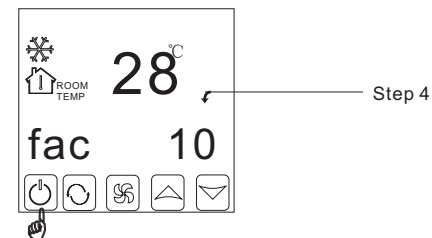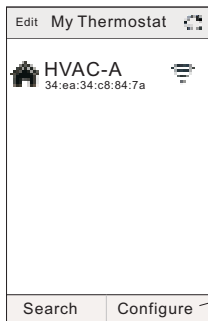Open "Beok AC" APP on your phone, you can see APP welcome page.

1.When the thermostat Wifi Symbol ⚏ twinkling fast and continuely,
you can start the configure on your Phone App.

Edit My Thermostat
🏠 HVAC-A
34:ea:34:c8:84:7a
Search   Configure   ← Press Configure key

2.Enter your wifi name and password, then press start connection at below.
When connection successfully, it will appear "Connection Success".

< Add a new device

Add a new device to WIFI network
WIFI Name:_____
WIFI Password:_____
☐ Display password

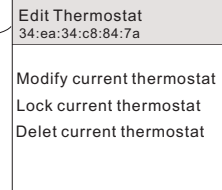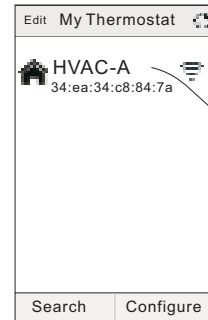<<Possible cause of wifi connection faliure>>

Start Connection

Attention: Only when the WIFI symbol twinkling continuously, thermostat connection with phone will be succefully. If wifi twinkling stops but connection didn't finish, enter into Advanced setting to adjust wifi symbol again.

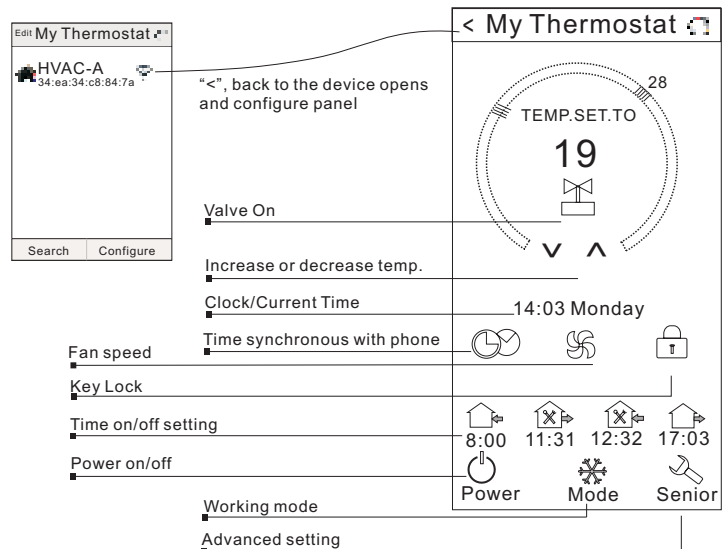3.After connection success, you need press "Search " key.

Edit My Thermostat
🏠 HVAC-A
34:ea:34:c8:84:7a

Press Search key

Search   Configure
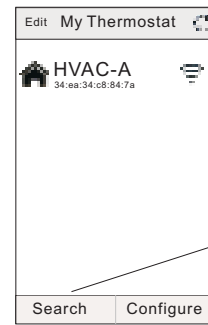
4.Then it will appear your wifi thermostat HVAC. HVAC is the factory setting name, when you have more than 2 thermostats, you can change it to any name you want.

Edit My Thermostat
🏠 HVAC-A
34:ea:34:c8:84:7a

Edit Thermostat
34:ea:34:c8:84:7a

Modify current thermostat
Lock current thermostat
Delet current thermostat

Search   Configure

a. Long press HVAC for 5 seconds, it will appear Edit Thermostat page.
   (IOS phone: slide to left, to edit.)

b. Press Modify Current Thermostat.

c. For examples:.
You can change HVAC to room 1, Bedroom Bath room, or anything you like.

APP Interface on the Phone

Edit My Thermostat
🏠 HVAC-A
34:ea:34:c8:84:7a
Search   Configure

"<", back to the device opens and configure panel

< My Thermostat

28
TEMP.SET.TO
19

Valve On

Increase or decrease temp. ∨ ∧

Clock/Current Time 14:03 Monday

Time synchronous with phone

Fan speed

Key Lock

Time on/off setting 8:00 11:31 12:32 17:03

Power on/off

Working mode Power   Mode   Senior

Advanced setting

Thermostat Setting through Phone Operation

1. Clock
Press 🕐 to make the thermostat time synchronize with the current time
(your phone time). You will see the words"Time sync success"

2. Fan Speed Setting
Press ⚏ to select the fan speed(Low speed, Medium speed, High speed, Auto)

3. Key Lock
Press 🔒 in the App interface, to lock the button of thermostat.
(Go into Advanced setting, you will find 3 locking way.
Unlock; Lock all button except power button; Lock all button)

4.Time Switch

Press   2 seconds to enter into time switch working, you will find bellows:

My Thermostat ⊡
Loop: <u>Exec...</u>
Week Setting:
Time on setting 1: 8:00
Time off setting 1:11:31
Time on setting 2:12:32
Time off setting 2:17:03

Choose loop mode
Execute once
12345
123456
1234567

07	59
8 :	00
09	01
Cancel	Ok

You can set 4 time on/off period. For example,

For example:
8:00am time-on, 11:31am time-off.(first time switch circle)
Thermostat start working automatically from 8:00am-----11:31am

2.Connect the lines with the LCD board.

3.Connect the LCD board into the wall plate.

XIII. Attention

Model	TDS21WIFI-AC2	TDS21WIFI-AC4
Thermostat	√	√
User Manual	√	√
Screws	√	√

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 by free after testing.

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

QUALIFIED CERTIFICATE

Wifi Series Touch Screen Thermostat

Inspector   ⊿ QC 01

PASS

Production Date   YEAR 20   MONTH

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.