1.2 Wired Controller XK-05/XK-04

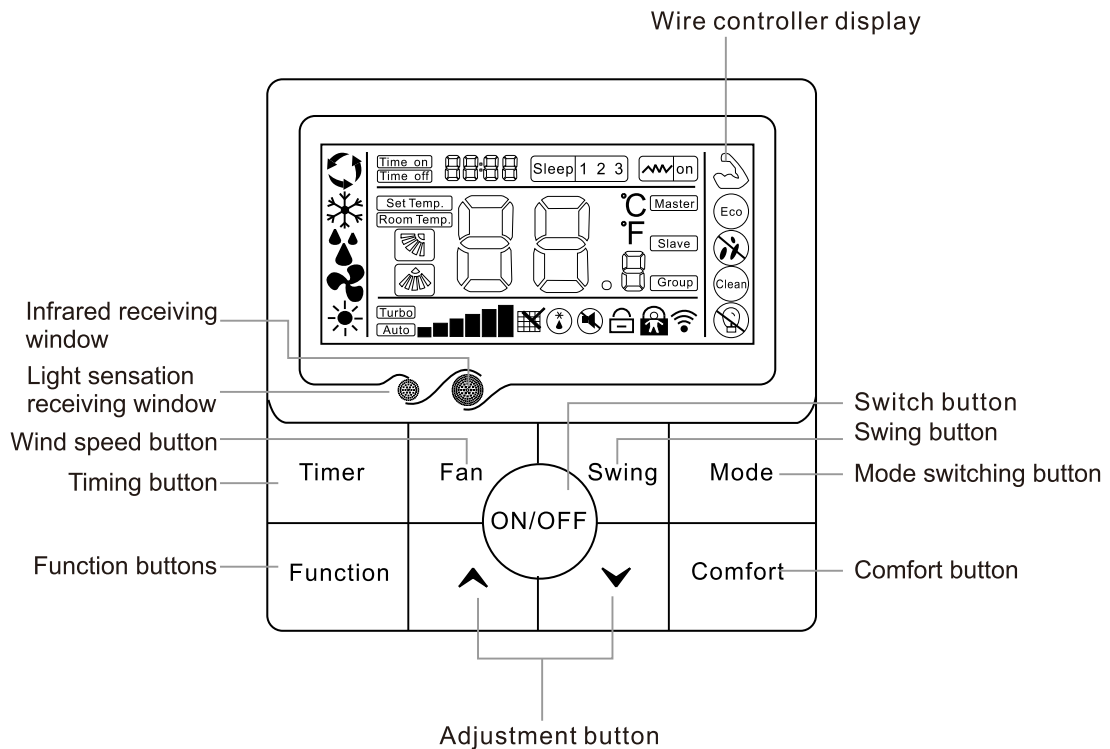| XK-05	Features
	Technical indicator 1. Power source:voltage DC 12V; 2. Work temperature range of PCB:(-10~+70)℃; 3. Work humidity range of PCB:RH20%~RH90%; 4. Button: Touch button 5. Dimensions(W*H*D):120*120*20mm
	Main functions 1. 8-keytouch button input 2. Buzzer prompt tone function 3. LCD+ white backlight 4. Display the failure of main controller 5. Ambient temperature detection sensor 6. Receive the signal of wireless remote controller

XK-04	Features
	Technical indicator 1. Power source:voltage DC 12V; 2. Work temperature range of PCB:(0~50)℃; 3. Work humidity range of PCB:RH20%~RH90%; 4. Button: Touch button 5. Dimensions(W*H*D):86*86*10.8mm
	Main functions 1. 9-keytouch button input 2. Buzzer prompt tone function 3.Comfort one-button setting 4. LCD+ white backlight 5. Display the failure of main controller 6. Ambient temperature detection sensor 7.Connect to indoor unit via 3-core shielded cable 8. Receive the signal of wireless remote control

XK-05

Wire controller display

Infrared receiving window

Light sensation receiving window

Fan speed button

Timing button

Function button

TIMER   FAN   SWING   MODE

FUNCTION   ON/OFF

Swing button

Mode switching button

ON/OFF button

Adjustment button

XK-04

Wire controller display

Infrared receiving window

Light sensation receiving window

Wind speed button

Timing button

Function buttons

Timer   Fan   Swing   Mode

ON/OFF

Function   Comfort

Switch button

Swing button
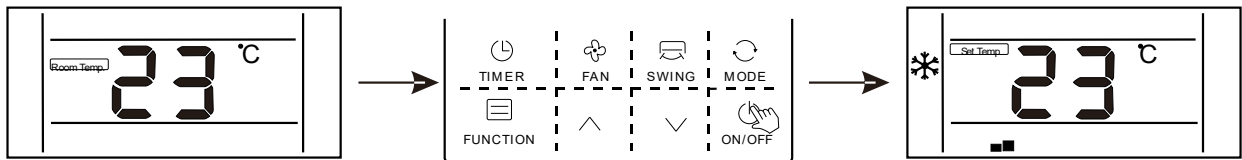
Mode switching button

Comfort button

Adjustment button

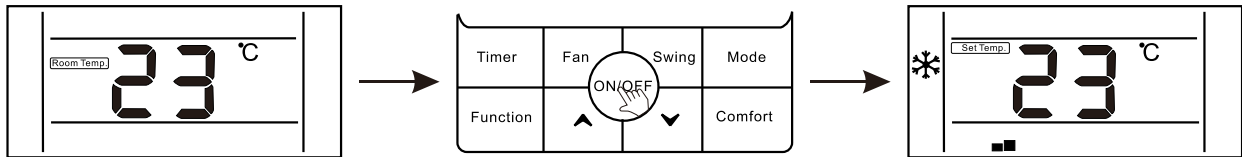**Detailed operation instructions (6)**

1.【ON/OFF button】

Press- "ON / OFF" button to start or shutdown the unit.

1.1.When the unit is running, users can regulate the operation mode, fan speed, setting temperature, special functions and other parameters on the wired controller
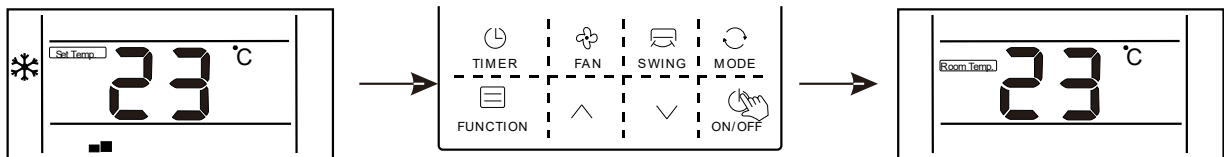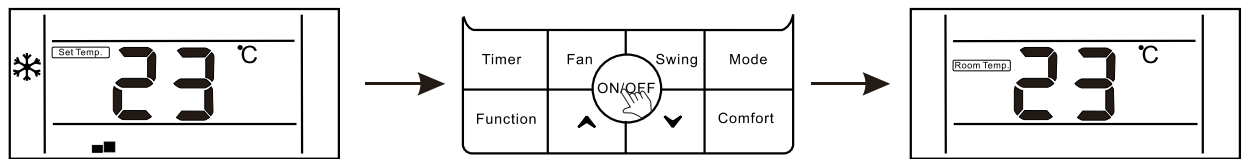
XK-05

XK-04

2.When the unit is standby, the wire controller displays indoor ambient temperature (Room temp.), the other content are not displayed.
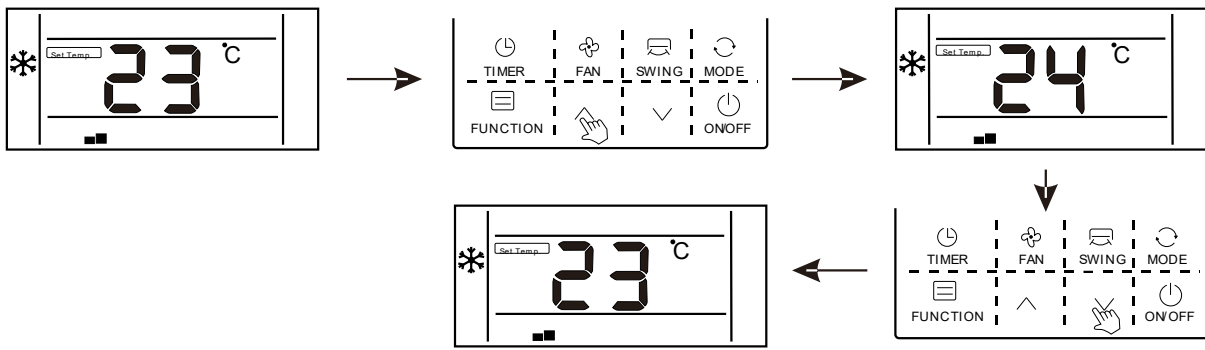
XK-05

XK-04
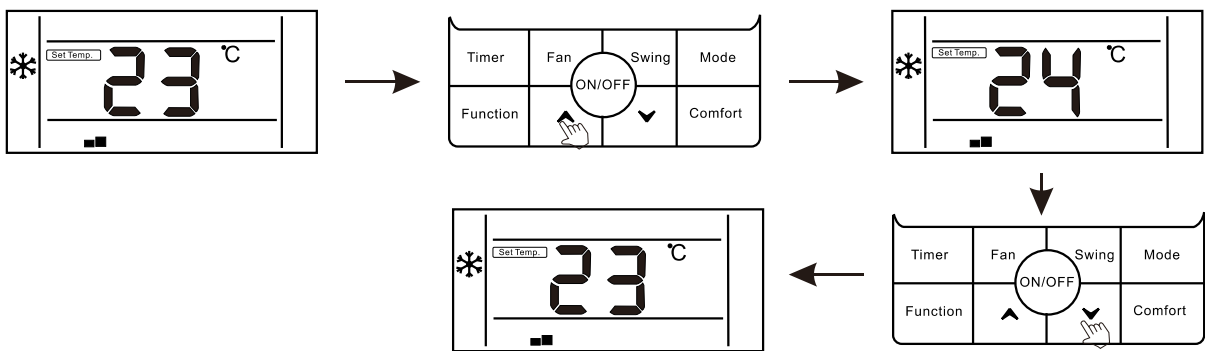

2.【∧ / ∨ button】

2.1.When the unit is running, press" ∧ " or " ∨ "button to increase or decrease the setting temperature by 1℃. Under COOL, DRY, and HEAT modes, the setting temperature range is 16 ℃ ～ 32 ℃；The controller will display" Set temp." to show the setting temperature;
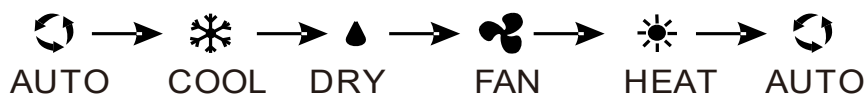
XK-05

XK-04

2.2.Under the function selection mode, press " ∧ " or " ∨ "button to select a function;

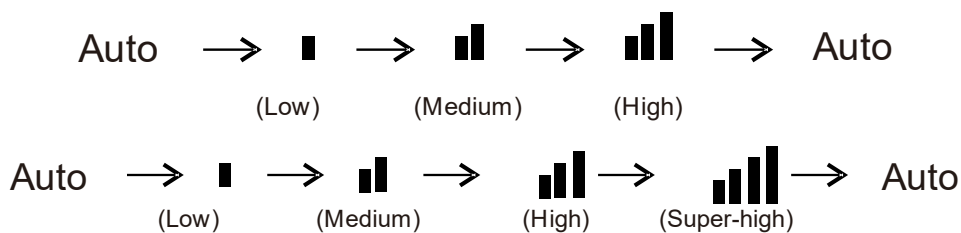2.3.Under the timing mode, press " ∧ " or " ∧ "button to setting time.

3.【Mode button】

When the unit is running, press "MODE" button, the running mode will switch according to the following order.

$$\circlearrowright \rightarrow \text{❄} \rightarrow \text{♦} \rightarrow \text{❁} \rightarrow \text{☀} \rightarrow \circlearrowright$$
AUTO   COOL   DRY   FAN   HEAT   AUTO

The initial setting temperature for each mode is 24 ° C, and there is no temperature setting and automatic wind under FAN mode.

4.【"Fan"buttom】

When the unit is running, press "Fan" button to switch fan speed in the following order:

Auto → ▮ → ▮▮ → ▮▮▮ → Auto
         (Low)   (Medium)   (High)

Auto → ▮ → ▮▮ → ▮▮▮ → ▮▮▮▮ → Auto
         (Low)   (Medium)   (High)   (Super-high)

5.【"Swing"button】

5.1.For the unit only has the function of up and down swing:

when the unit is running, press "Swing" button to enter or cancel up and down swing.

At the time of opening up and down swing," [icon] " is lighting. At the time of closed, swing icon will disappear.If the unit has positioning swing function, press "Swing" button to regulate the swing angle in the order

[icon] → [icon] → [icon] → [icon] → [icon] → [icon] → cancel up and down swing

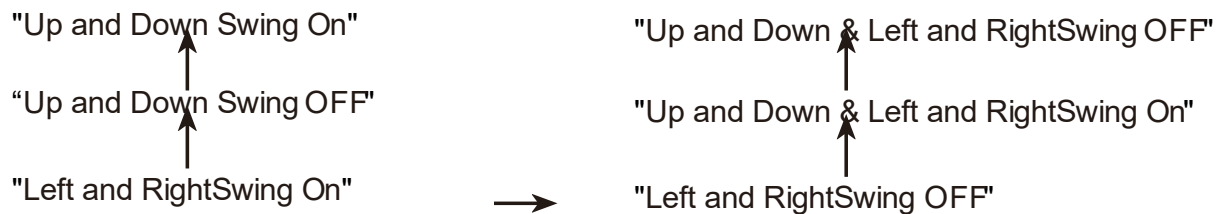5.2.For the unit only has the function of left and right swing:

when the unit is running, press "Swing" button to enter or cancel left and right swing. At the time of opening left and right swing," [icon] " is lighting. At the time of closed, swing icon will disappear. If the unit has positioning swing function, press "Swing" button to regulate the swing angle in the order

[icon] → [icon] → [icon] → [icon] → [icon] → [icon] → cancel up and down swing
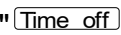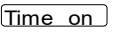
5.3.For the unit has the functions of left and right swing and up and down swing:

Press "Swing"   button, the swing mode will switch in the following cycle order:

"Up and Down Swing On"   "Up and Down & Left and RightSwing OFF"

↑   ↑

"Up and Down Swing OFF"   "Up and Down & Left and RightSwing On"

↑   ↑

"Left and RightSwing On"   →   "Left and RightSwing OFF"
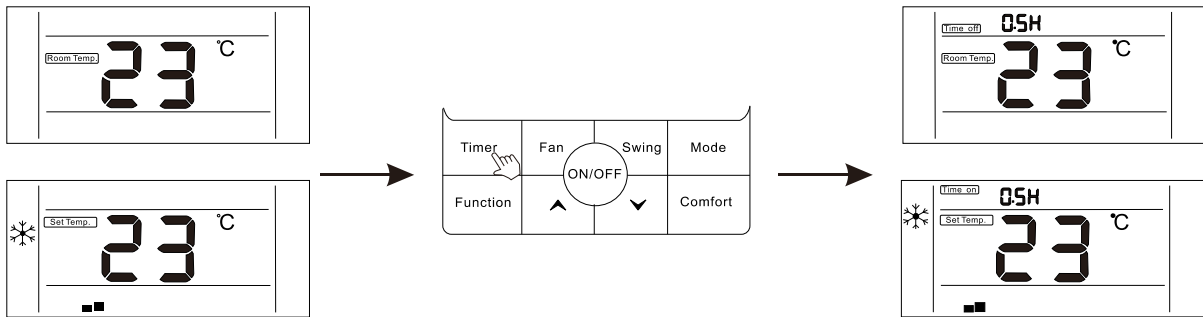
6.【"Timing"button】

Users can set shutdown timing time when the unit is running, and set starting-up timing time when the unit is standby.

6.1.Press Timer button when the unit is running, the wired controller will display " Time off " and users can   set the shutdown timing time; when the unit is standby, the wired controller will display" Time on " , and users can set the starting-up timing time
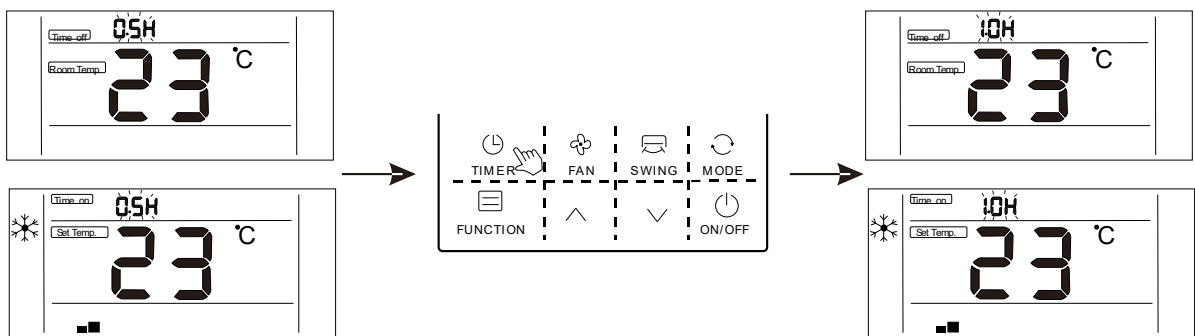
XK-05
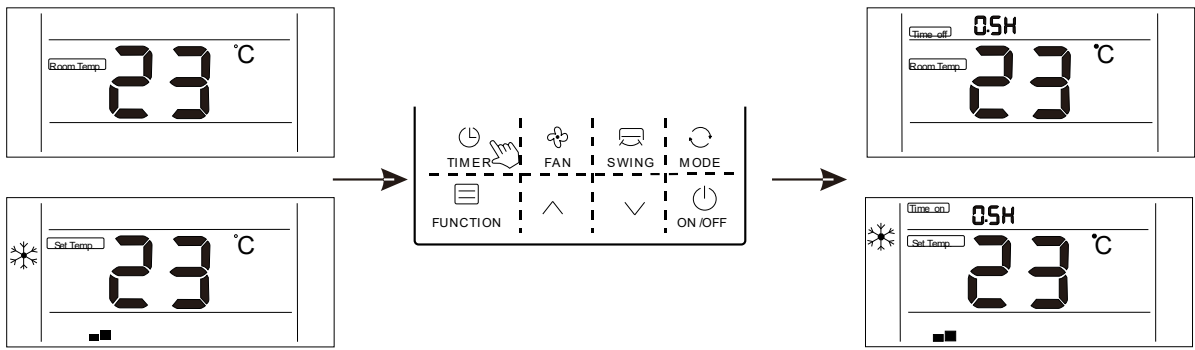
XK-04
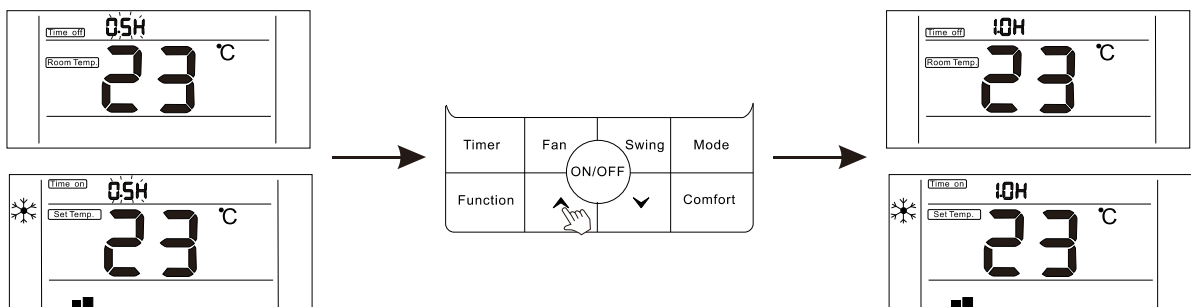

6.2.After entering timing time setting interface, the default timing time is 0.5H, at this moment, press" ∧ " or " ∧ "button to regulate the timing time. If the button is not pressed for 10 seconds, the timing setting will be canceled, and then return to the state of non-timing.
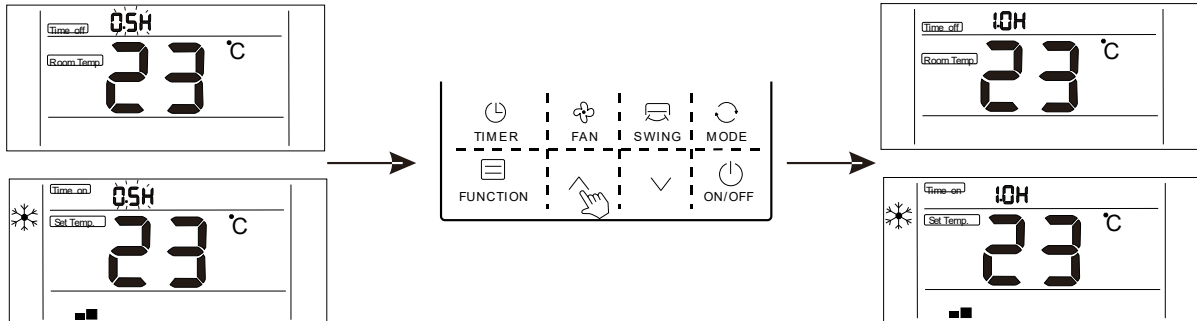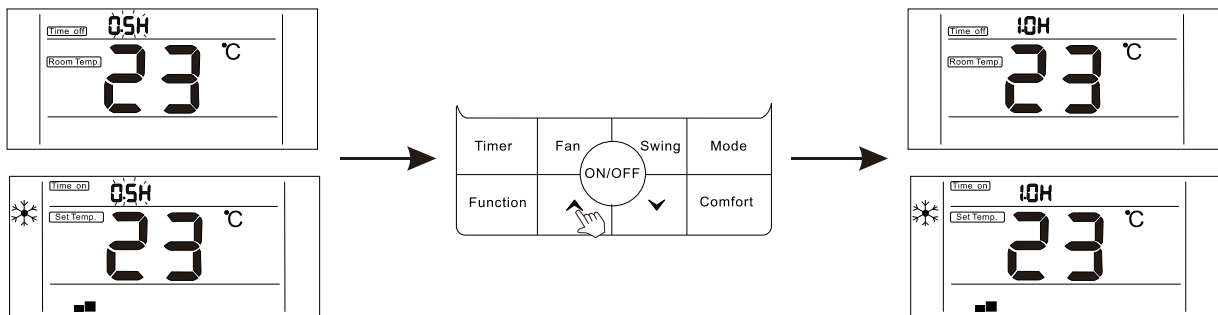
XK-05

XK-04

6.3.After the setting of timing, press "Timer" button again to confirm. The timing setting is successful and the time bar will stop blinking.
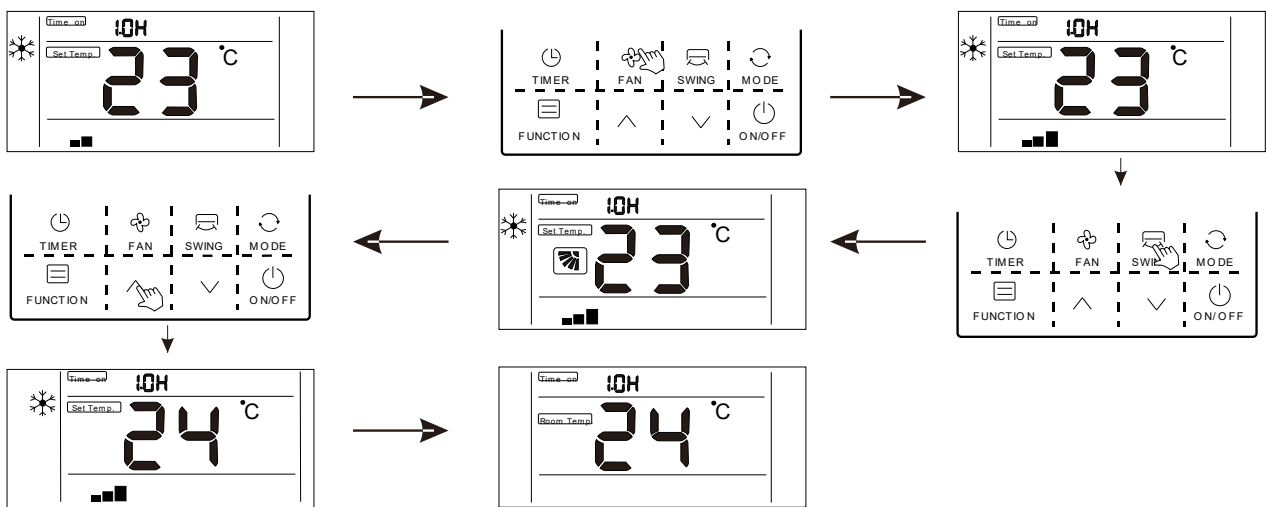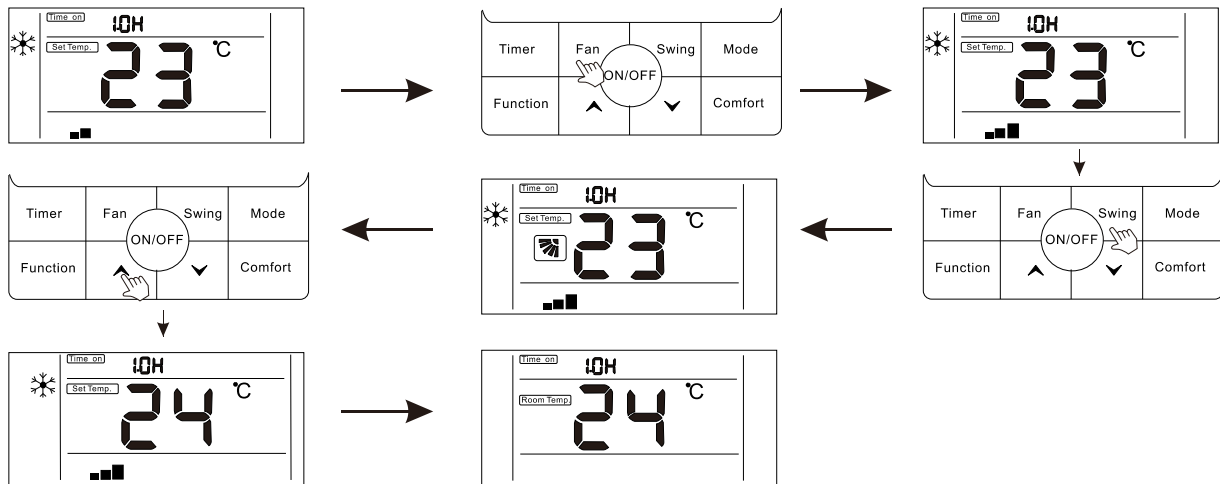
XK-05

XK-04

6.4.After the setting "Timer On"function, you can adjust the fan speed, running mode, set temperature, and swing angle. If there is no operation for 10 seconds, standby screen will be displayed.

XK-05

XK-04

6.5.Timing range: 0.5～24 hours.

press " ∧ " or " ∧ "button once, the timing time will increase or decrease by 0.5 hours.When the timing time is more than 10 hours, press " ∧ " or " ∧ " button once, the timing time will increase or decrease by1 hour.

6.6.Press "Timer" button   or "ON / OFF" button to exit Timer ON or Timer OFF.

Function description (6)

The wire controller is for the general-purpose, specific functions fo the controller are subject to the functions of your air conditioning unit.

Note: In the interface of function setting, press any button such as Timer, Fan, Swing, Mode, ON/OFF, and Comfort to exit the interface and conventional operation interface will display. If there is no operation for 10S, you can exit the interface.

Enter function: Press function button to enter function selection interface , press " ∧ " or " ∧ "button to select a function, and the corresponding icon will lash, press "function" button again to confirm the function.

Cancel function: Press function button to enter function selection interface, press " ∧ " or " ∧ "button to select a function, and the corresponding icon will lash, press "function" button again to cancel the function.

1.【"Turbo"】

Turbo function: The fan speed will be ultra-high in turbo mode and users can achieve rapid cooling or heating effect.
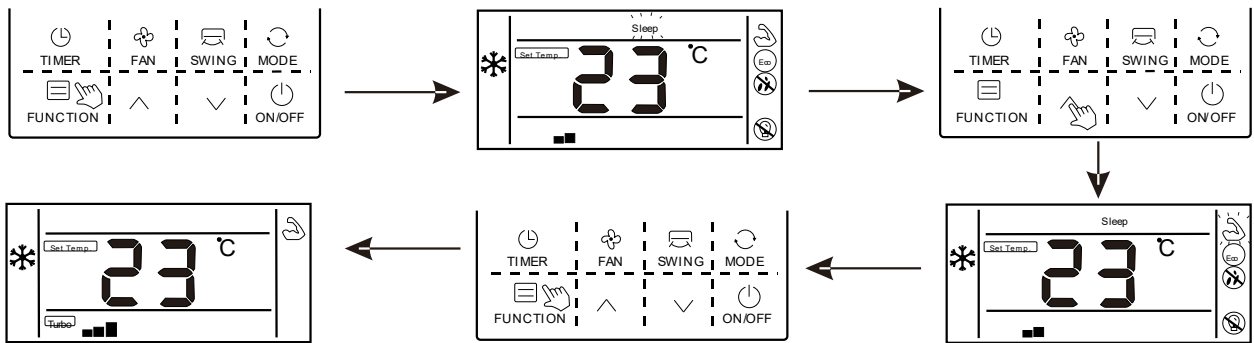
Enter turbo function:

1.When the unit is running in cooling or heating mode, press "Function" key to enter the interface of function selection.
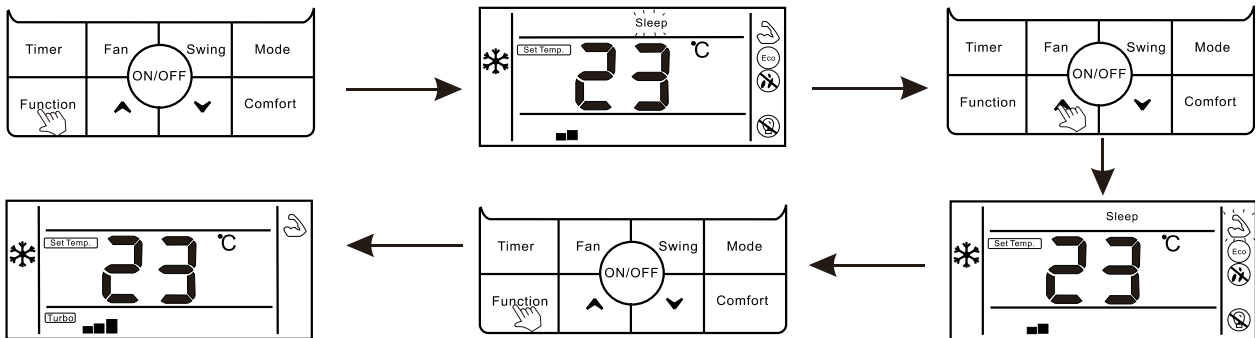
2.Press " ∧ " or " ∧ "button to switch to turbo function, at this moment, " 🤙 " icon is flashing.

3.Press   Function   button to confirm turbo function, at this moment, icon " 🤙 " fan speed display is (Turbo and highest fan speed icon).

XK-05

XK-04

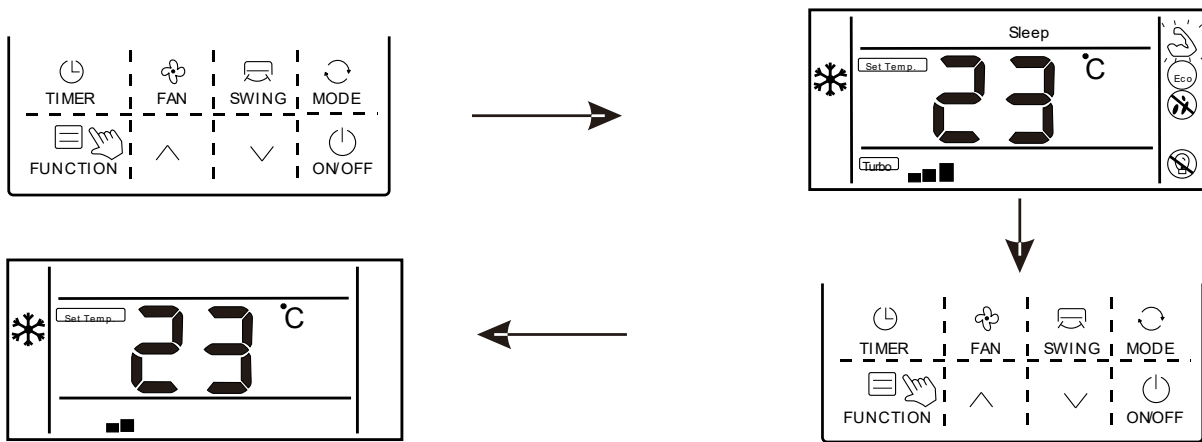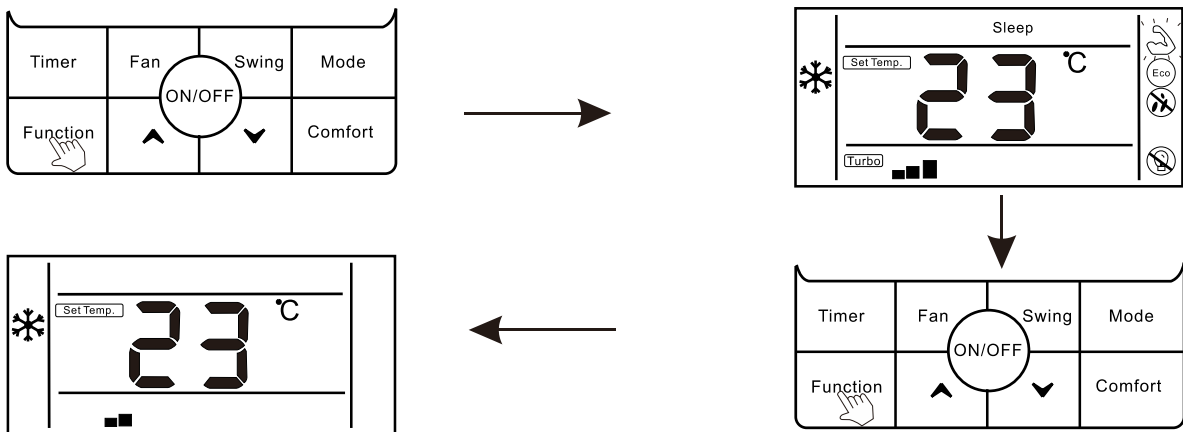

Cancel turbo function:

1.When turbo function is opened, press "Function" button to enter the interface of function selection.

2. Press " ∧ " or " ∧ "button to switch to strong function, at this moment, icon" 🤙 " is flashing, press Function button to cancel strong function, and strong icon would not display

XK-05

XK-04

Note: The unit without turbo function can also set turbo function on the wired controller, the performance is high fan speed, but " Turbo " icon and " ✋ " icon do will not display.
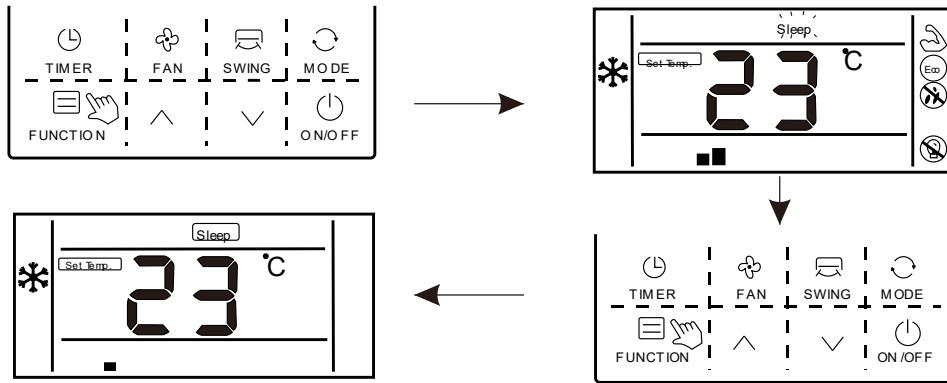
2.【"Sleep"】

Sleep function: Make indoor unit will run according to pre-set sleep temperature curve, which creates a comfortable sleep environment and improves sleep quality
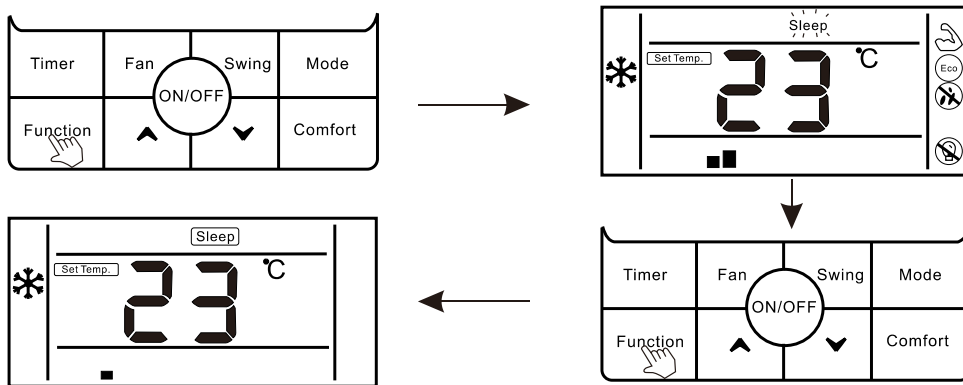
Enter sleep function:

1.In the state of running, press "Function" button to enter the interface of function selection.

2. Press " ∧ " or " ∧ "button to switch to sleep function, " Sleep "icon is flashing at this moment

3.Press " Function " button to open sleep function, at this moment,   icon " Sleep " is lighting

XK-05
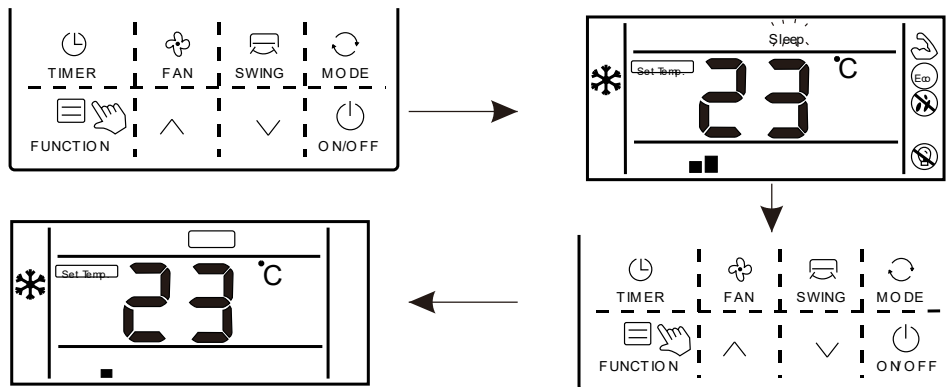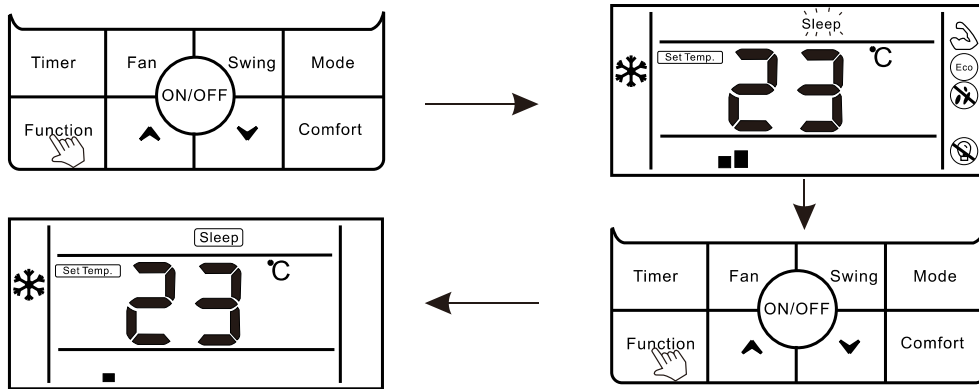

XK-04

Cancel "sleep" function:

1.In the state of running, press "Function" button to enter the interface of function selection.

2. Press " $\wedge$ " or " $\wedge$ "button to switch to sleep function, " Sleep "icon is flashing

3.Press " Function " button again to cancel sleep function

XK-05

XK-04

3. 【"ECO"】

Enter ECO function:

1.Press "Function" button to enter the interface of function selection.

2. Press " $\wedge$ " or " $\wedge$ "button to switch to ECO function, at this moment " (Eco) "icon is flashing

3.Press "Function" button again to confirm ECO function, at this moment, " (Eco) "icon is lighting

XK-05

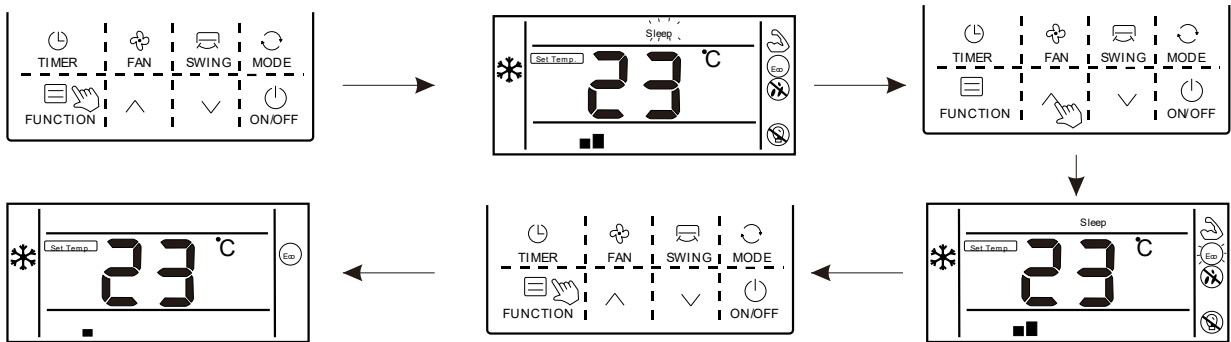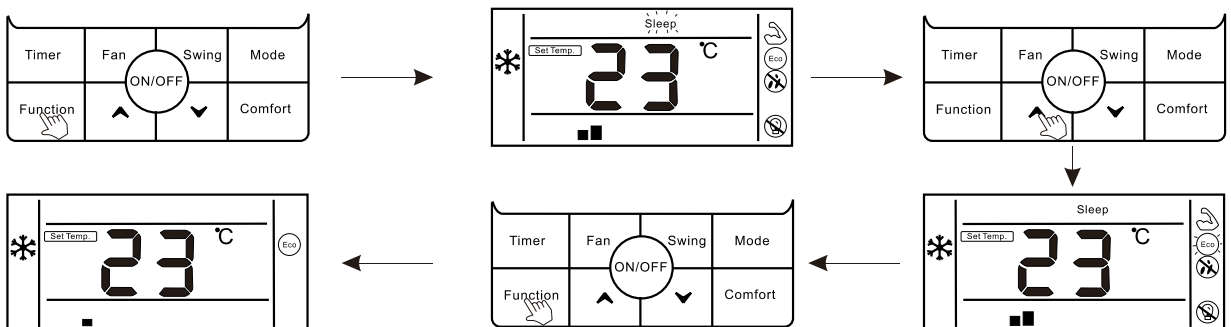

XK-04

Cancel ECO function:

1.Press "Function" button to enter the interface of function selection.

2. Press " ∧ " or " ∧ "button to switch to ECO function, at this moment " Eco "icon is flashing

3.Press "Function" button again to cancel ECO function

XK-05
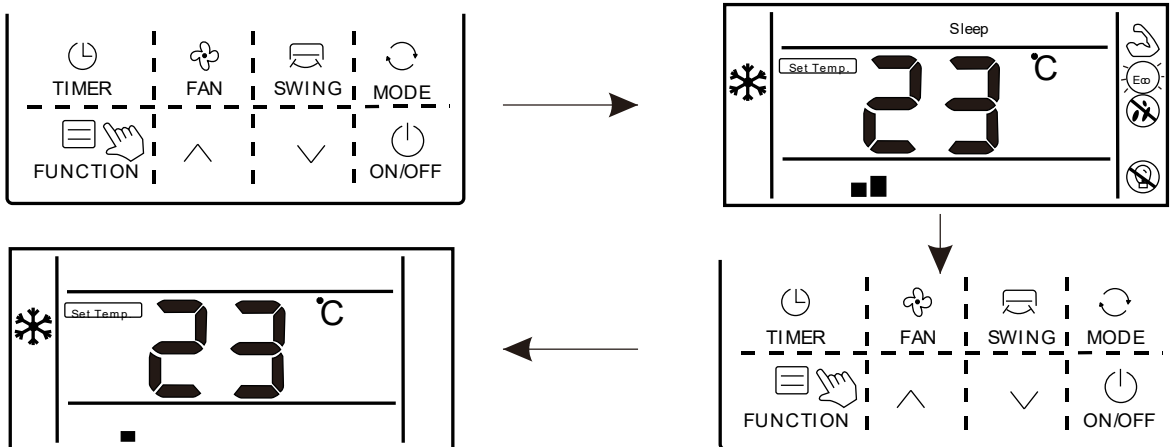
XK-04
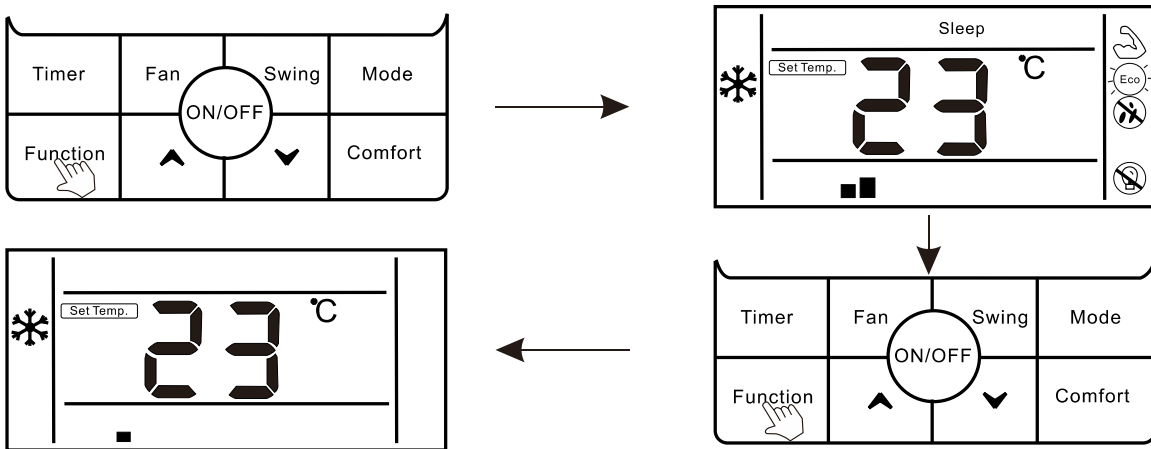
4. 【"Mildew-proof"】

Mildew-proof function: After shutdown, the air conditioner would automatically dry the moisture in the evaporator of indoor unit, so as to avoid mildewing.

Enter mildew-proof function:

1.Under COOL and DRY mode, press "Function" button to enter the interface of function selection

2.Press   " ∧ " or " ∧ " button to switch to the mildew-proof function setting interface,at this moment, icon " ⊗ " is flashing;

66

3.Press "Function" button again to enter mildew-proof function, icon" ⊗ "is lighting.

XK-05
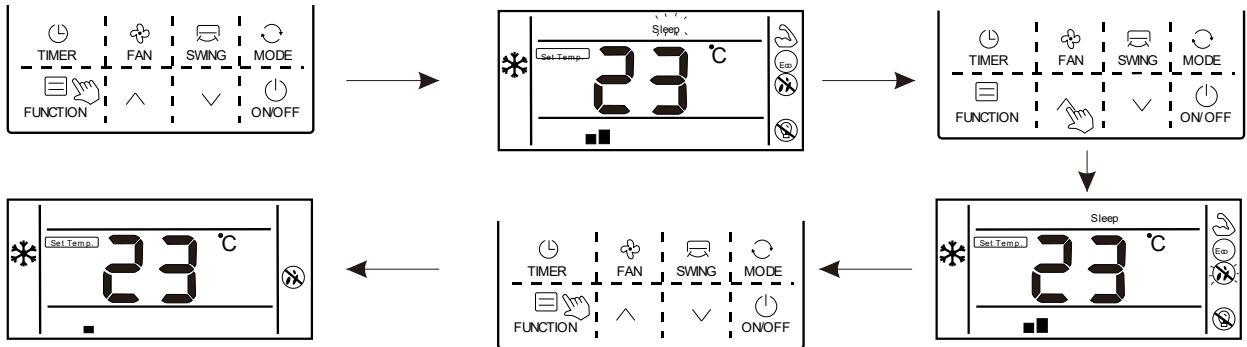
XK-04
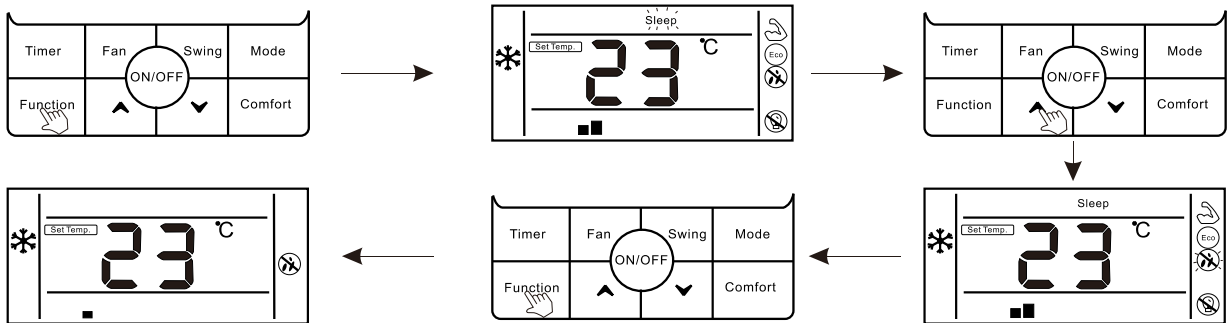
Cancel fungus-proof function:

1.When mildew proof function is ON, press "Function" button to enter the interface of function selection

2.Press " ∧ " or " ∧ " button to mildew-proof function icon " ⊗ " is flashing;

3.Press "Function" button again to cancel   mildew proof function,icon will " ⊗ " disapper

XK-05
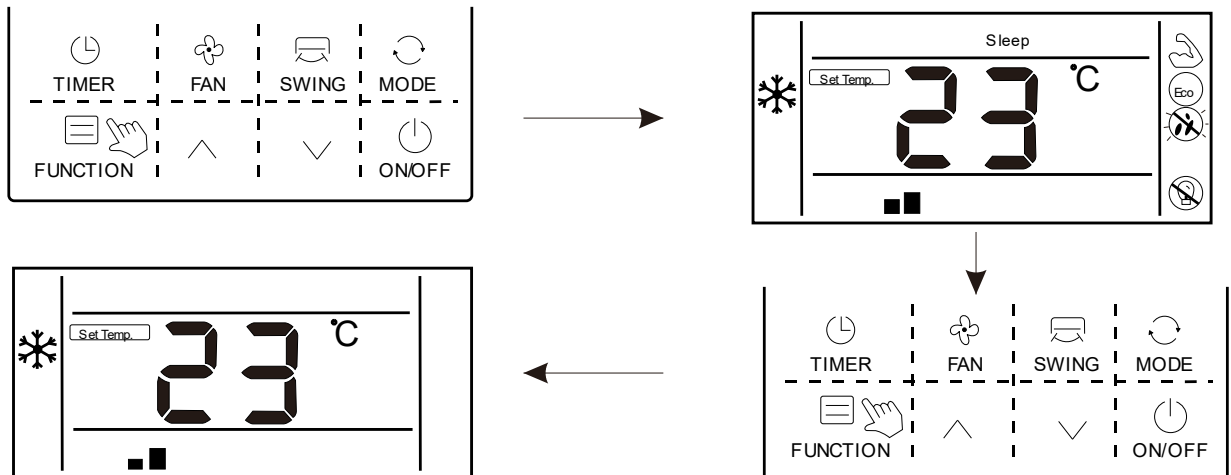
XK-04
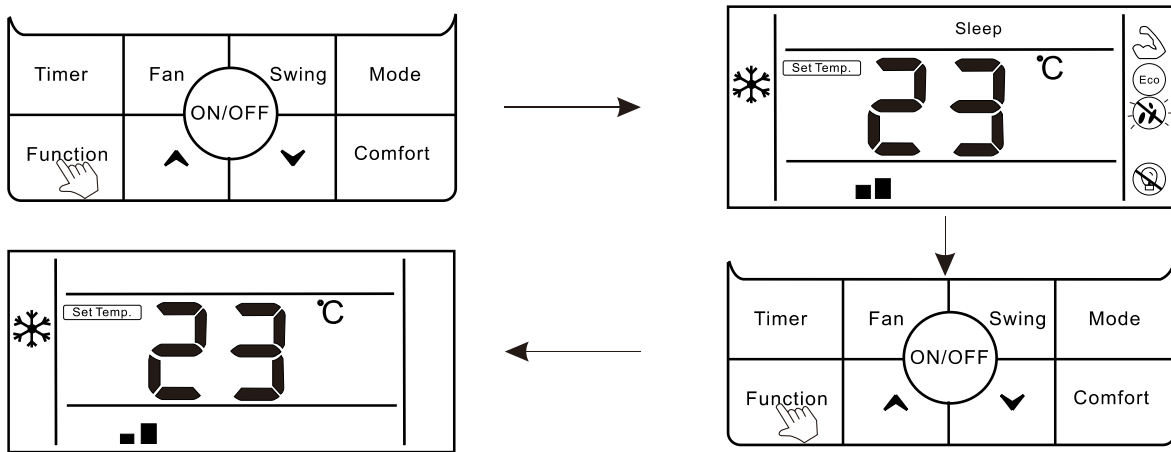
5.【"Light Sensation"】

Light sensation function: Detect the On and Off of indoor lamplight and switch o low fan speed when the lamplight is off, which can reduce the noise and create a comfortable sleep environment for users

Enter light sensation function:

1.In the state of running, press "Function" button to enter the interface of function selection.

2.Press " ∧ " or " ∧ " button to light sensation function icon " 🔯 " is flashing;

3.Press Function button again to enter light sensation function, at this moment, icon" 🔯 " is lighting.

4.When light sensation function is on, if the indoor lamplight is OFF and lasts for 20minutes, the unit will automatically enter sleep mode. If the indoor lamplight is ON, and lasts for 20 minutes, the unit will cancel sleep mode and run according to the setting fan speed.

XK-05
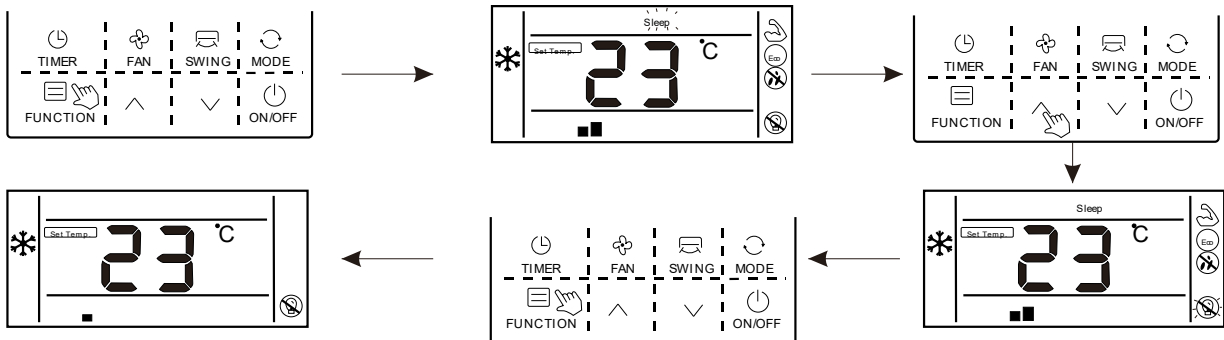
XK-04

Cancel light sensation :

1.When light sensation function is on, press "Function" button to enter the interface of function selection.

2.Press   " ∧ " or " ∧ " button to light sensation function icon "   " is flashing;

3.Press Function button again to cancel light sensation function, icon "   "will disappear

XK-05
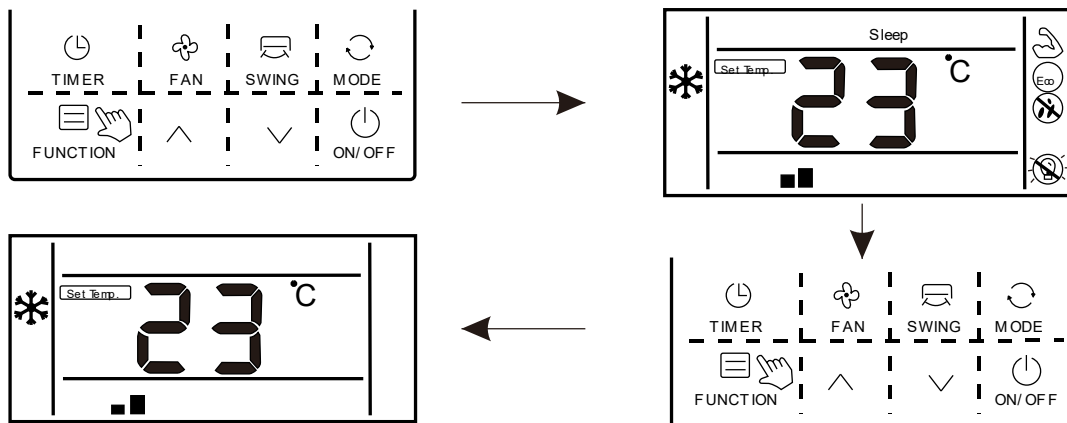
XK-04
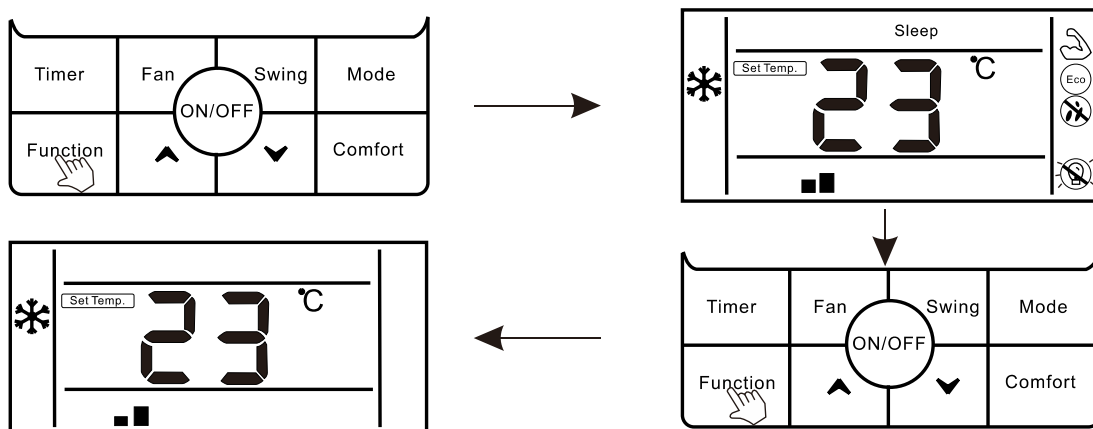
6.【Clean】

Clean function: The air conditioner can clean the evaporator automatically, which can not only keep air fresh, but also reduce the recession of cooling effect.
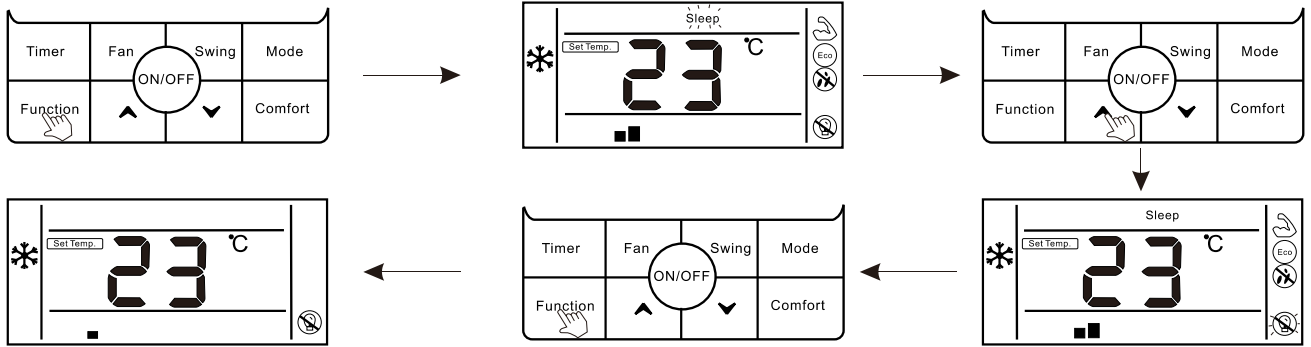
Enter clean function :

1.In the state of standby, press "Function" button to enter the interface of function selection

2.Press Function button again to confirm clean function, at this moment, icon " ⊙Clean "is lighting

3.When the unit is performing clean function, the wire controller will keep displaying icon" ⊙Clean ",until it is finished

XK-05
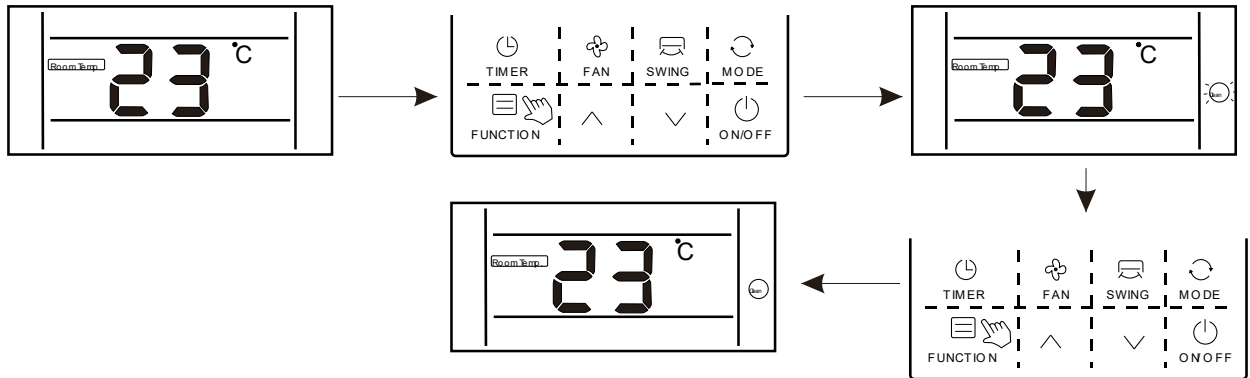
XK-04
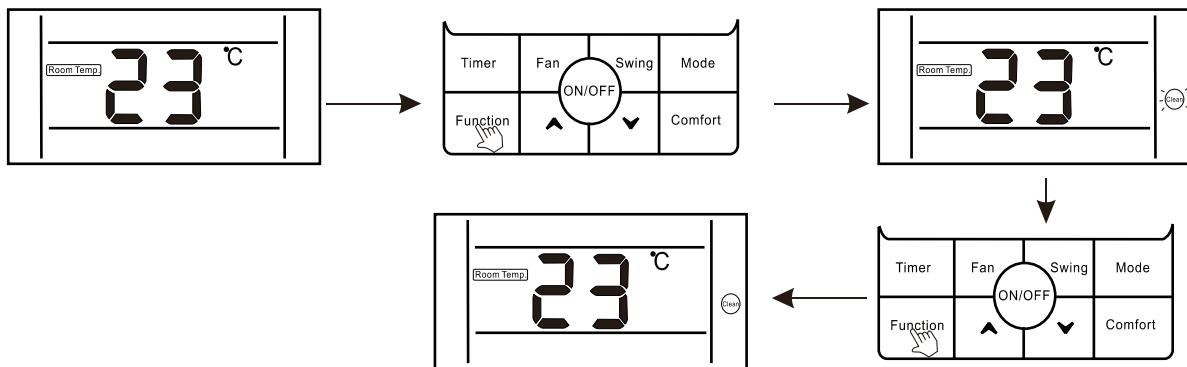
Display prompt function (10)

1.【"WIFI"】 function display

If the unit is equipped with a WIFI function module, the icon " 📶 " is lighting

If the unit is not equipped with a WIFI function module, the icon " 📶 " does not display

2.【"Shielding"】function display

When unit is locked by centralized control, the wired controller will display

3.【"Mute"】 function display

When the unit enter silent function, display " 🔇 " icon, when silent function is cancelled,the icon does not display.

Note: The unit without silent function can also set silent through wired controller, but it

shows in the way of low wind grade, but " 🔇 " does not display.

4.【"Oil Return / Defrost" 】function display

When the unit is running in the state of Oil Return or Defrost, " ❄ " icon is lighting on wire controller.

When the unit has finished Oil Return or Defrost process, " ❄ " icon does not display.

5.【"Filter Screen Clean"】function display

Filter screen cleaning reminder function: The unit can record its running time, when reaching the time set by the user, it will remind the user to clean the filter screen, so as to avoid prolonged cleaning and filter screen blockage, which can result in poor heating/cooling effect, abnormal protection, bacterial breeding, and other problems.

When the running time reaches the filter screen cleaning reminder time set by a user,

the unit will give out a reminder of filter screen cleaning, wired controller displays" ▦ " icon, reminding the user to clean filter screen. At this moment, long press "Timer" button for 5S to cancel the reminder, then the icon does not display. A filter screen cleaning reset signal is sent to the unit.

6.【Celsius and Fahrenheit switching】display

When users set Celsius to be valid, the wired controller will display Celsius temperature.

When users set Fahrenheit to be valid, the wired controller will display corresponding Fahrenheit temperature synchronously.

7.【"Child Lock" function display】

Press both" ∧ " or " ∧ " buttons for more than 5S to enter locking, the controller will

display " 🔒 " . In the state of locking, operations on the wired controller are disabled (but remote control receiving is valid).

The method of unlocking: Press both" ∧ " or " ∧ " buttons for more than 5S or power off

the unit to release the locking ("🔒" does not display).

8.【Remote control 】function

The wired controller can receive remote control commands and update the current status

Start-up the unit with remote controller, wired controller work in accordance with the state set on the remote controller and displays corresponding working mode;

9. Room temperature sensorequipped on the wired controller

When the wire controller is equipped with a room temperature sensor and the sensor is not damaged, it is default that the ambient temperature detected by the sensoron the controller and the temperature value will be sent to the main PCB of the unit.

If the wire controller is not equipped with a room temperature sensor or the sensor is damaged, the room temperature will be detected by the temperature sensor of the unit itself.

10.Fault display

When the unit has fault, the time bar will directly display the fault code and flash, the display mode is Er: MM (MM is the fault code, please read the corresponding roduct manual).

2. Parameters Setting

Indoor unit's parameters can be set by remote controller (YK-L) and wired controller—For after-sales (In indoor side ,After a new PCB was replaced, indoor parameters set is necessary).

2.1 Parameter Setting table (General parameter)

Parameter / Serial Number	【04】	【05】	【15】
	Model of IDU	Capacity of IDU	Selection of room sensor
ALMD-H18/NDR3HA	12	18	01
ALMD-H24/NDR3HA	12	24	01
ALMD-H30/NDR3HA	12	30	01
ALMD-H36/NDR3HA	12	36	01
ALMD-H42/NDR3HA	12	42	01
ALMD-H48/SDR3HA	12	48	01
ALMD-H60/SDR3HA	12	60	01
ALCA-H12/NDR3HAA(B)	37	18	00
ALCA-H18/NDR3HAA(B)	37	18	00
ALCA-H24/NDR3HYB	01	24	01
ALCA-H36/NDR3HYB	01	36	01
ALCA-H42/NDR3HYB	01	42	01
ALCA-H48/ SDR3HYB	01	48	01
ALCA-H60/ SDR3HYB	01	48	01
ALCF-H18/NDR3HA	13	18	00
ALCF-H24/NDR3HA	13	24	00
ALCF-H36/NDR3HA	13	36	00
ALCF-H42/NDR3HA	13	42	00
ALCF-H48/SDR3HA	13	48	00
ALCF-H60/SDR3HA	13	60	00
ALCF-H18/NDR3HF	46	18	02
ALCF-H24/NDR3HF	46	24	02

ALCF-H36/NDR3HF	46	36	02
ALCF-H42/NDR3HF	46	48	02
ALCF-H48/SDR3HF	46	48	02
ALCF-H60/SDR3HF	46	60	02

Note:

【**04**】：Model of IDU

【**05**】： Capacity of IDU，

【**15**】： Selection of air return temperature sensor;   00 – sensor in indoor unit ,

01—Sensor in wired controller

2.2 Working mode parameter   (Heating only function)

Under heating only mode,IDU cannot receive signal of other working mode besides "OFF" signal.

Once change the parameter,need to power on again to activate the function.

Series No	Value	Meaning	Available mode
11	**0**	All mode	Cooling. Dehumidification. Swing. Heating. Auto
	1	No "Auto" mode	Cooling. Dehumidification. Swing. Heating
	2	Cooling	Cooling. Dehumidification. Swing
	3	Heating	Heating only

Note: The duct type indoor unit produced before 2019.3 need to update program for IDU pcb so that achieve heating only.
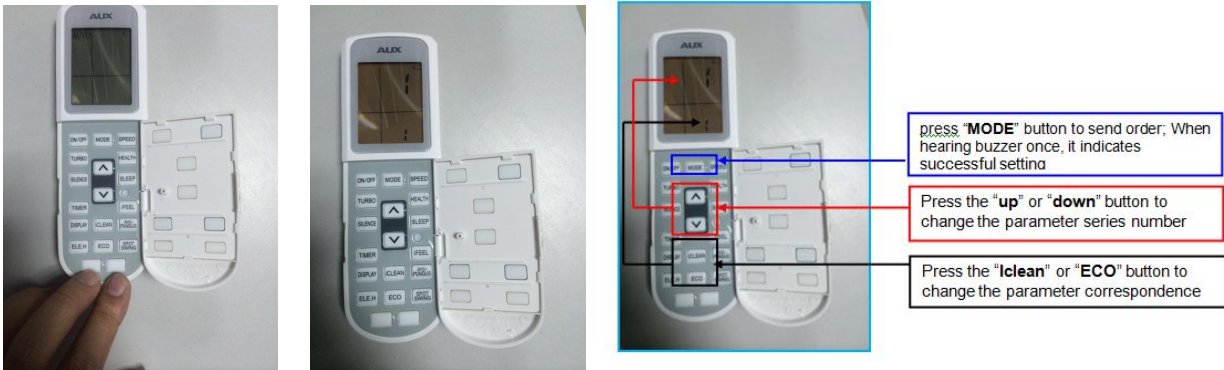
2.3 Parameter Setting by YK-L

Enter the setting interface

① Make sure the remote controller is *off*

② Press the *two white button* at the down side simultaneously *more than 10s* to enter the address setting mode.

Parameter Setting

③ Press the **[∧]** or **[∨]** button to change the parameter series number

④ Press the **[IClean]** or **[ECO]** button to change the parameter correspondence

⑤ Press the **[MODE]** button to send order (Sent signal to display panels or receivers), Then can hearing buzzer once

For example:

If you changed a new PCB to 18K cassette indoor unit , then you should set the type of the unit , check the above【**Parameter Setting Items table**】--- Mode of IDU is 【04】, 18K cassette paratmeter is 【37】

Change to 【04】

Change to 【37】, then press【Mode】to confirm
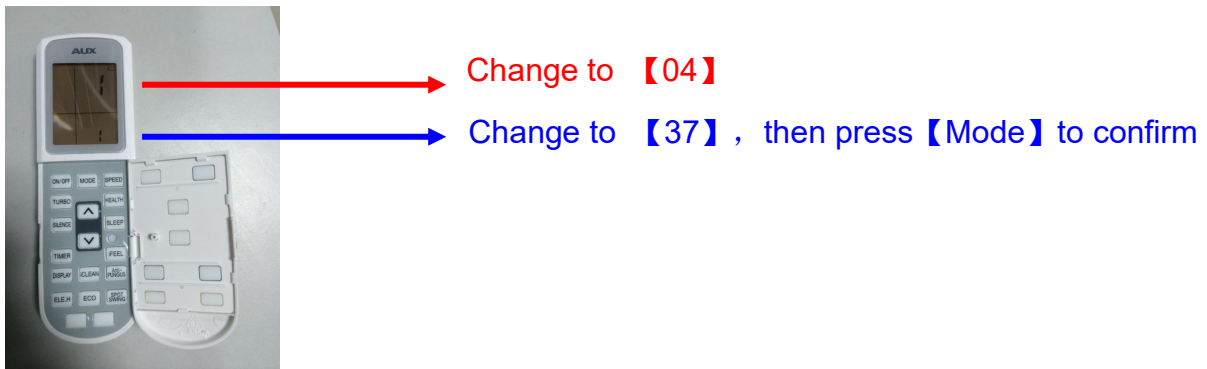
2.4 Parameter Setting by XK-04/ XK-05

Parameter checking

Press the "FUNCTION" button for 5 seconds, enter into the parameter checking interface .

the wired controller's address will be displayed in the temperature zone of LED screen (press "FUNCTON" button, the wired controller's address will flash, the wired controller 's address can be changed through press the "∧" or "∨" , then press "FUNCTION" buton to confirm);

In the timing setting zone :**HH** means seires NO. **MM** means parameter value. After Entering into IDU parameter checking , via pressing the "∧" or "∨" buton ,you can check the parameter value of seires NO. 【04】【05】【1】.
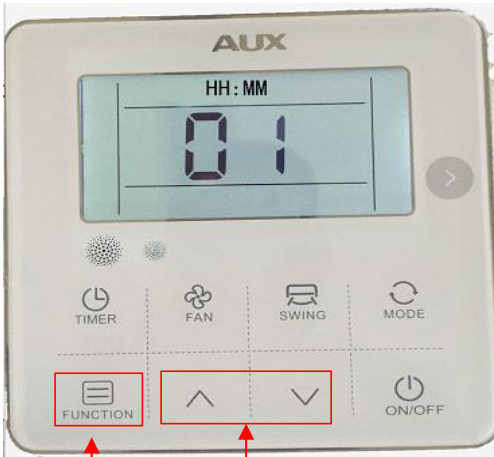

HH: means seires NO.
MM: means parameter value.

2. Press "∧"or"∨" , change the parameter value of seires NO.

1. Press **"FUNCTION"** for 5S , enter parmater checking model

Parameter setting

Only in parameter checking model ,press the "FUNCTION" button for 5 seconds, Enter into parameter setting model.

The corresponding parameter valve"**MM"** begain to flash,changing it throuth pressing the "∧" or "∨" buton,after finished ,press the "FUNCTION" button to confirm.When finishing parameter setting,it will automatically go back to parameter checking model.

2. Press "⋀"or"⋁" , change the parameter value.

1. Only in checking model, Press **"FUNCTION"** for 5S , enter parmater checking model

For example:

If you want to change the PCB from cassette type to mid duct type for 42k unit , you should set the type of the unit , check the above【**Parameter Setting Items table**】--- Mode of IDU is 【04】, 42K cassette paratmeter is 【11】, 42K mid duct paratmeter is 【39】

【0411】change to 【0439】（step1）

③ Press **"FUNCTION"** for 5S again, enter parmater setting model;

② Press the"⋀"or"⋁"button to get "**04 11**"

① Press **"FUNCTION"** for 5S,enter parmater check model;

【0411】change to 【0439】（step2）

④ Press the"∧"or"∨"button to get **"04 39"**

⑤ After finishing setting , press **"FUNCTION"**to confirm

3. Room Card Function

3.1 Function setting

Parameter setting	Model	Contact State	Operation model specification
0900	Normal （default)		Stand
0901	Room Card (optional)		the IDU Will be into standby mode, can be controlled by controller
			the IDU Will be into standby mode, can't be controlled by controller

※ How to set the room card function (Set method same as the above 【Part 9 →
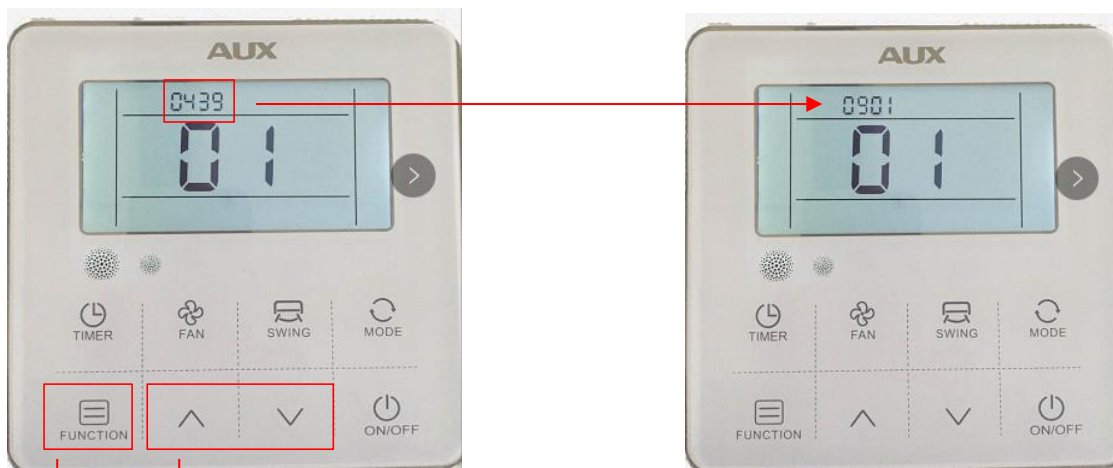2.2Parameter Setting by YK-L **or** 2.3 Parameter Setting by XK-04/XK-05 】

For example (XK-05)

Step 1

③ Press **"FUNCTION"** for 5S again, enter parmater setting model;

② Press the" ︿ "or" ﹀ "button to get "**09** 39"

①   Press **"FUNCTION"** for 5S,enter parmater check model;
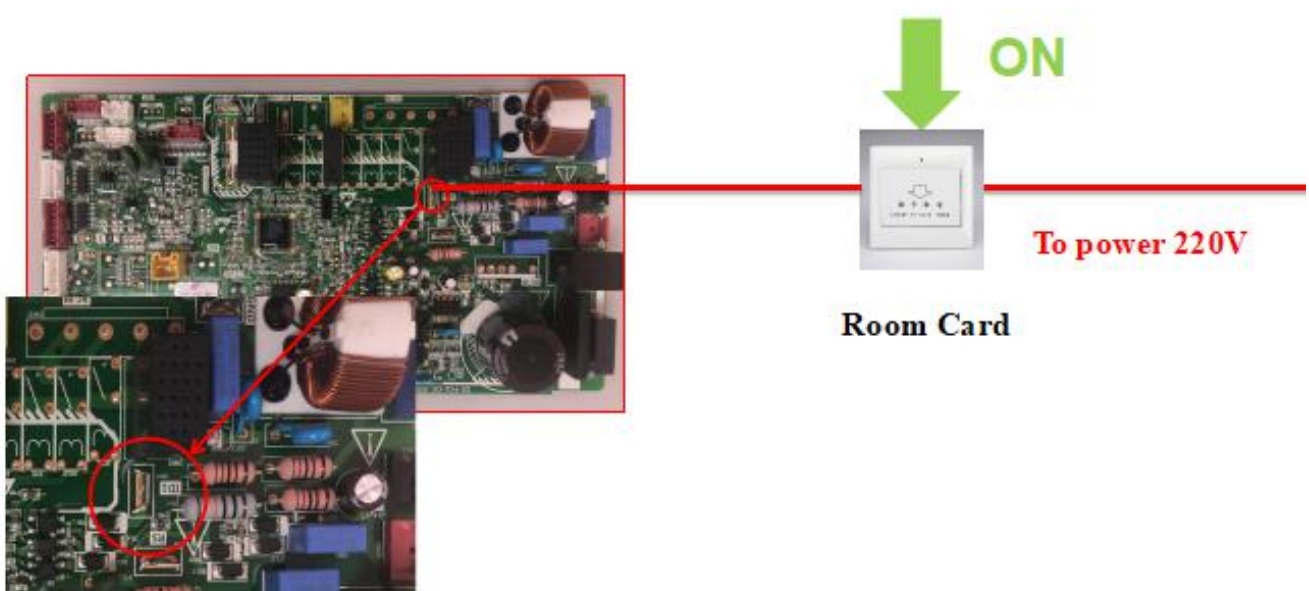
Step 2

④ Press the "⋀" or "⋁" button to get **"09 01"**

⑤ after finishing setting , press **"FUNCTION"** to confirm

3.2 Wiring diagram

When the room card is inserted, the air conditioning can be controlled ; when you leave the room, the AC will standby, can not be controlled .

【DUCT TYPE】

【Cassette】and 【ceiling&floor】

Room Card

To power 220V

ON