

Operation Manual

DC Inverter Ducted Air-Conditioning Unit (09K~60KBtu/h)

Indoor Unit

GFH09K3CI
GFH12K3CI
GFH18K3CI
GFH24K3CI
GFH30K3CI
GFH36K3CI
GFH36K3CI
GFH42K3CI
GFH42K3CI
GFH48K3CI
GFH48K3CI
GFH60K3CI

Outdoor Unit

GUHD09NK3CO
GUHD12NK3CO
GUHD18NK3CO
GUHD24NK3CO
GUHD30NK3CO
GUHD36NK3CO
GUHD36NM3CO
GUHD42NK3CO
GUHD42NM3CO
GUHD48NK3CO
GUHD48NM3CO
GUHD60NM3CO

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Safety Considerations

Please read this manual carefully before use and operate correctly as instructed in the manual.

You are specially warned to note the two symbols below:

 **WARNING!** : A symbol indicating that improper operation might cause human death or severe injury.

 **WARNING!** : A symbol indicating that improper operation might cause human property damage.

 **WARNING!**

- Children should be supervised to ensure that they do not play with the appliance.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- This unit shall be used in offices restaurants residences or similar places.
- Please seek an authorized repair station for installation work. Improper installation might cause water leakage, electric shock or fire.
- Please install at a place strong enough to support the weight of air conditioner unit. If not , the air conditioner unit might fall down and cause human injury or death.
- To ensure proper drainage, the drainage pipe shall be correctly installed according to installation instructions. Take proper measures for heat preservation to prevent condensing. Improper installation of pipes might cause .leakage and wet the articles in the room.
- Do not use or store flammable, explosive ,poisonous or other dangerous substances beside the air conditioner.
- In case of trouble (e. g .burnt smell) ,please immediately cut off the main power of air conditioner unit .
- Keep air flow to avoid shortage of oxygen in the room.
- Never insert your finger or any objects into air outlet and inlet grill.
- Never plug or unplug the power cable directly to start or stop the air conditioning unit.
- Please take constant care to check if the mounting rack is damaged after long use.
- Never modify the air conditioner. Please contact the dealer or professional installation workers for repair or relocation of the air conditioner.
- The appliance shall not be installed in the laundry.
- Before installation, please check the power supply for compliance with the ratings on nameplate. Check the power safety as well (Operating by professional)
- Before use, please check and confirm if the cables , drainage pipes and pipelines are correctly connected, hence to eliminate the risk of water leakage, refrigerant leakage, electric shock or fire.
- Main power must be securely earthed to ensure effective grounding of air conditioner unit and avoid the risk of electric shock. Please do not connect the earth cable to coal gas pipe, water pipe, lightning rod or telephone line.
- Once started , the air conditioner shall not be stopped at least after 5 minutes or longer, otherwise the oil return to compressor may be affected.
- Do not let the child to operate the air conditioner unit.
- Do not operate the air conditioner unit with wet hands.
- Please disconnect the main power before cleaning the air conditioner or replacing the air filter.
- Please disconnect the main power if to put the air conditioner unit out of use for a long period.

- Please do not expose the air conditioner unit directly under corrosive environment with water or moisture.
- Please do not foot on or place any goods on air conditioner unit.
- After electrical installation, the air conditioner unit shall be energized for electrical leakage test .(Operating by professional)
- If the supply cord is damaged ,it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard .
- An all-pole disconnection switch having a contact separation of at least 3mm in all poles should be connected in fixed wiring.
- The appliance shall be installed in accordance with national wiring regulations.
- The temperature of refrigerant circuit will be high, please keep the interconnection cable away from
- The power cord must be separated with the communication line

the copper tube

User Notice

☆ Ensure unified power supply for each indoor unit.

☆ Never install wired controller in wet place or under sunlight directly.

☆ Shielding twisted pair line must be adopted as signal line or wiring (communication) of wired controller once the unit is installed in the place where there is electromagnetic interference.

Make sure communication line is connected into correct port to avoid communication malfunction.

Never knock, throw or frequently disassemble the wired controller.

Never operate the wired controller with wet hand.

I Displaying Part



Fig.1 Outline of wired controller

1.1 LCD Display of Wired Controller

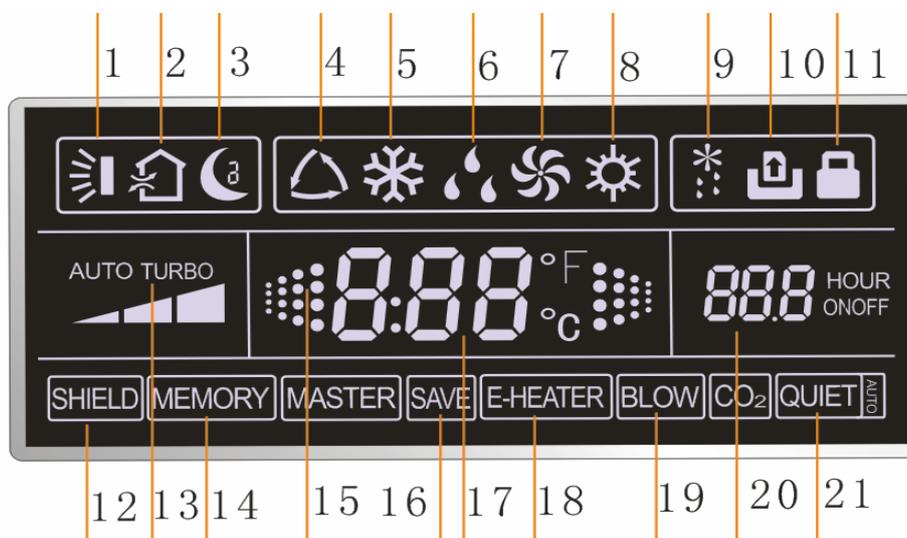


Fig.2 LCD display

1.2 Instruction to LCD Display

Table 1

No.	Description	Instruction to Displaying Contents
1	Swing *	Swing function
2	Air *	Air exchange function
3	Sleep	Sleeping states
4	Running mode	Each kind of running mode of indoor unit (auto mode)
5	Cooling	Cooling mode
6	Dry	Dry mode
7	Fan	Fan mode
8	Heating	Heating mode
9	Defrost	Defrosting state
10	Gate-control card *	Gate control
11	Lock	Lock state
12	Shield	Shielding state (buttons, temperature, on/off, mode or save is shielded by long-distance monitoring)
13	Turbo	Turbo function state
14	Memory	Memory state (Indoor unit resumes original setting state after power failure and then power recovery)
15	Twinkle	Flicking when unit is on without operation of buttons
16	Save	Energy-saving state
17	Temperature	Ambient/setting temperature value
18	E-Heater *	E-HEATER display means electric-heater is available
19	Blow	Blow mark
20	Timer	Timer-displayed location
21	Quiet	Quiet state(two types: quiet and auto quiet)
Notes: The functions with * are reserved for other models and are not applicable for the models listed in this manual.		

II Buttons

2.1 Silk Screen of Buttons



Fig. 3 Silk screen of buttons

2.2 Instruction to Function of Buttons

Table 2

No.	Description	Function of Button
1	Enter/cancel	① Function selection and canceling; ② Press it for 5s to enquiry the outdoor ambient temperature.
2	▲	① Running temperature setting of indoor unit, range :16 ~ 30°C ② Timer setting, range:0.5-24hr ③ Switchover between quiet/auto quiet
6	▼	
3	Fan	Setting of high/middle/low/auto fan speed
4	Mode	Setting of cooling/heating/fan/dry mode of indoor unit
5	Function	Switchover among these functions of air/sleep/turbo/save/e-heater/blow/quite
7	Timer	Timer setting
8	On/off	Turn on/off indoor unit
4 Mode and2 ▲	Memory function	Press Mode and ▲ for 5s under off state of the unit to enter/cancel key memory function (If memory is set, indoor unit will resume original setting state after power failure and then power recovery. If not, indoor unit is defaulted to be off after power recovery. Memory function is defaulted to be off before outgoing.)
2 ▲and 6 ▼	Lock	Upon startup of the unit without malfunction or under off state of the unit, press ▲ ▼ key at the same time for 5s in to lock state. In this case, any other buttons won't respond the press. Repress ▲ ▼ key for 5s to quit lock state.

III Installation of Wired Controller

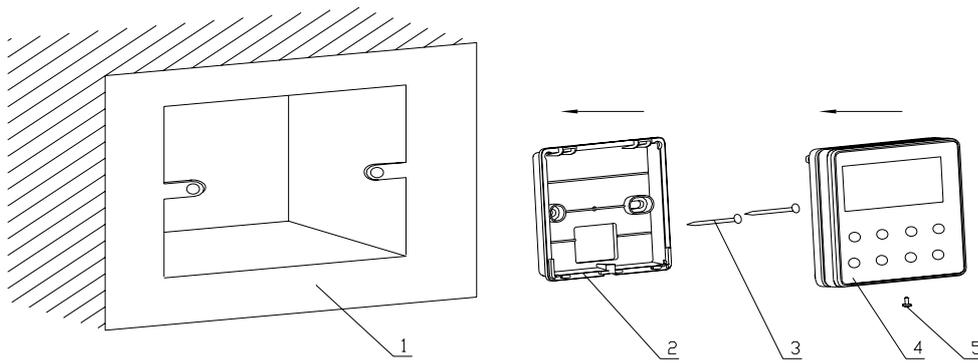


Fig.4 Sketch for Installation of Wired Controller

No.	1	2	3	4	5
Description	Socket's base box installed in the wall	Soleplate of controller	Screw M4X25	Front panel of controller	Screw ST2.2X6.5

Fig.4 Sketch for Installation of Wired Controller Pay attention to the following items during installation of wired controller:

1. Cut off power supply of heavy-current wire embedded in mounting hole in the wall before installation. It is prohibited to perform the whole procedure with electricity.
2. Pull out 4-core twisted pair line in mounting hole and then make it through the rectangle hole at the back of controller's soleplate.
3. Joint the controller's soleplate on wall face and then fix it in mounting hole with screws M4X25.
4. Insert the 4-core twisted pair line through rectangle hole into controller's slot and buckle the front panel and soleplate of controller together.
5. At last, fix the controller's front panel and soleplate with screws ST2.2X6.5.

Caution:

During connection of wirings, pay special attention to the following items to avoid interference of electromagnetism to unit and even failure of it.

1. To ensure normal communication of the unit, signal line and wiring (communication) of wired controller should be separate from power cord and indoor/outdoor connection lines. The distance between them should be kept 20cm in min.

2. If the unit is installed at the place where there is interference of electromagnetism, signal line and wiring (communication) of wired controller must be shielded by twisted pair lines.

IV Instruction to Operation

4.1 On/Off

Press **On/Off** button to turn on the unit.

Repress this button to turn **off** the unit.

Note: The state shown in Fig.6 indicates off-state of the unit after energization.

The state shown in Fig.7 indicates on-state of the unit after energization.



Fig.6 Off state of the unit



Fig.7 On state of the unit

4.2 Mode Setting

Under on-state of the unit, press **Mode** button to switch the operation modes as the following sequence:

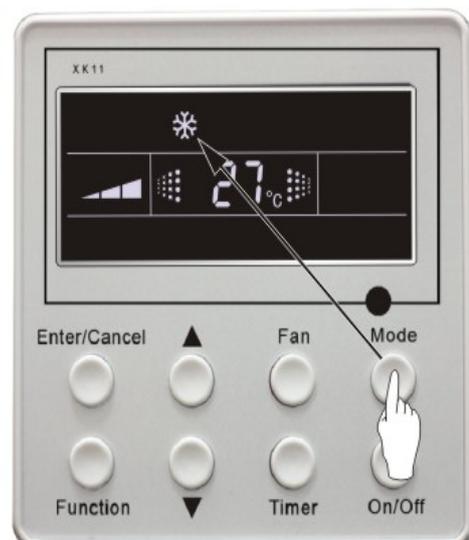
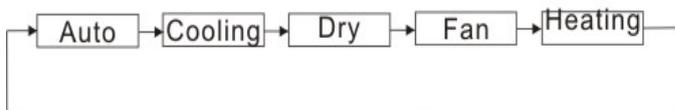


Fig.8

4.3 Temperature Setting

Press ▲ or ▼ button to increase or decrease of setting temperature under on-state of the unit. If press either of them continuously, temperature will be increased or decreased by 1°C every 0.5s.

In Cooling, Dry, Fan and Heating mode, temperature setting range is 16°C ~ 30°C.

In Auto mode, the setting temperature is un-adjustable.

As shown in Fig.9.



Fig.9

4.4 Fan Speed Setting

Press **Fan** button, fan speed of indoor unit will change as below:

As shown in Fig.10.

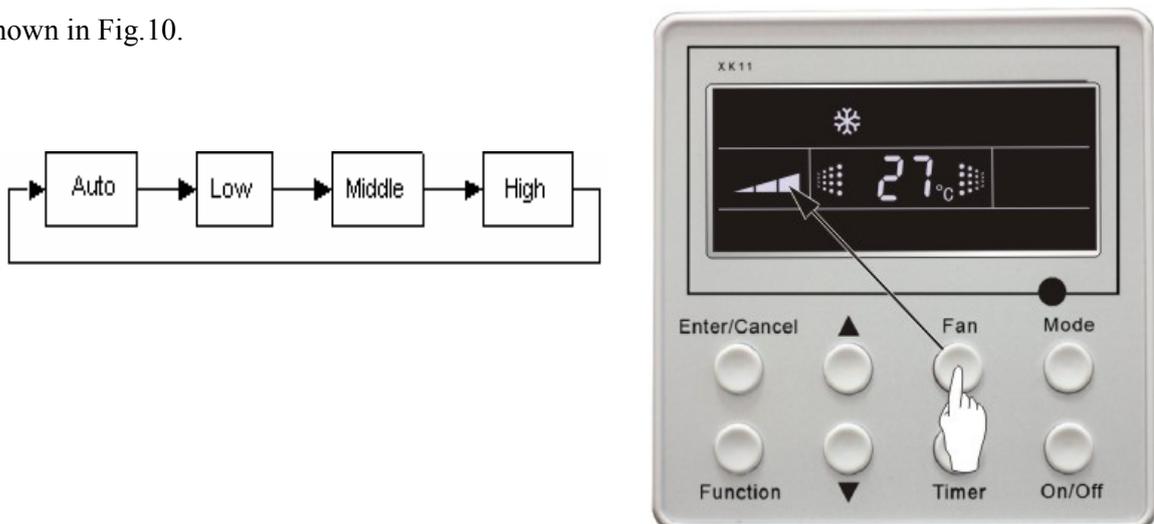


Fig.10

4.5 Swing Control Function

Under on-state of unit, press **Function** button till the unit enters swing control function and then press **Enter/cancel** button to turn on “swing” control function.

During swing function, press **Function** button till the unit enters swing control function and then press **Enter/cancel** button to cancel swing control function.

Swing control function setting is shown in Fig.11.

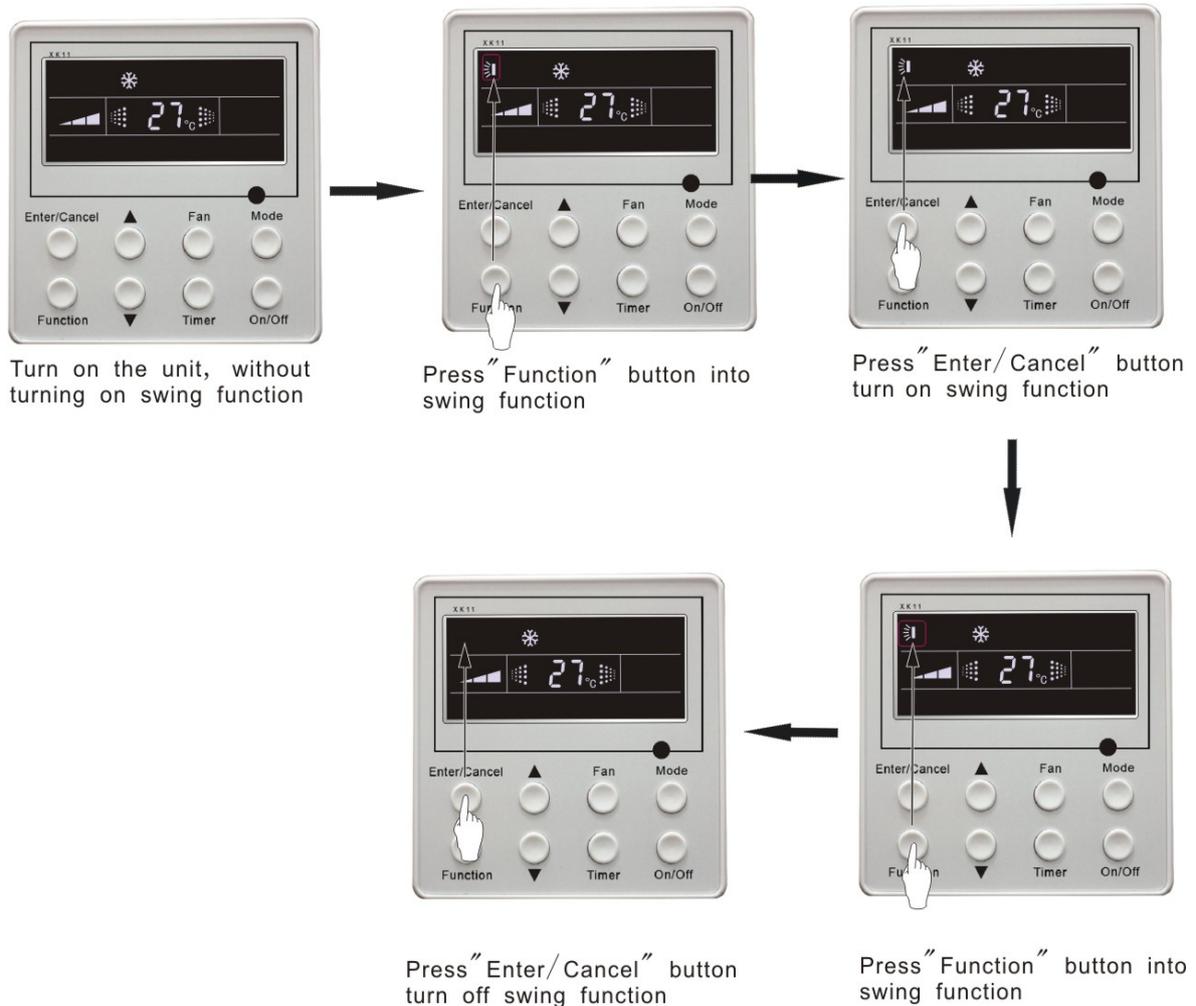


Fig.11

4.6 Timer Setting

Press **Timer** button to set timer off of the unit. Under off-state of the unit, press **Timer** button to set timer on of the unit in the same way.

Timer on setting: Under off-state of the unit without timer setting, if **Timer** button is pressed, LCD will display **xx. Hour**, with **ON** blinking. In this case, press **▲** or **▼** button to adjust timer on and then press **Timer** to confirm. If **Mode** button is pressed before pressing **Timer** button to confirm, timer mode will be switched to timer off setting mode. In this case, LCD displays **xx. Hour**, with **OFF** blinking. In this case, press **▲** or **▼** button to adjust timer off and then press **Timer** to confirm. When LCD displays "xx. Hour on off"; **xx. Hour** means time of timer on, but time of timer off won't be displayed.

Timer off setting: Under **on-state** of the unit without timer setting, if **Timer** button is pressed, LCD will display **xx. Hour**, with **OFF** blinking. In this case, press **▲** or **▼** button to adjust timer on and then press **Timer** to confirm. If **Mode** button is pressed before pressing **Timer** button to confirm, timer

mode will be switched to timer on setting mode. In this case, LCD displays **xx. Hour**, with **ON** blinking. In this case, press ▲ or ▼ button to adjust timer on and then press **Timer** button to confirm. When LCD displays **xx. Hour On Off**, **xx. Hour** means time of timer off, but time of timer on won't be displayed.

Cancel timer: After setting of timer, if **Timer** button is pressed, LCD won't display **xx. Hour** so that timer setting is canceled.

Timer off setting under **on-state** of the unit is shown as Fig.12.

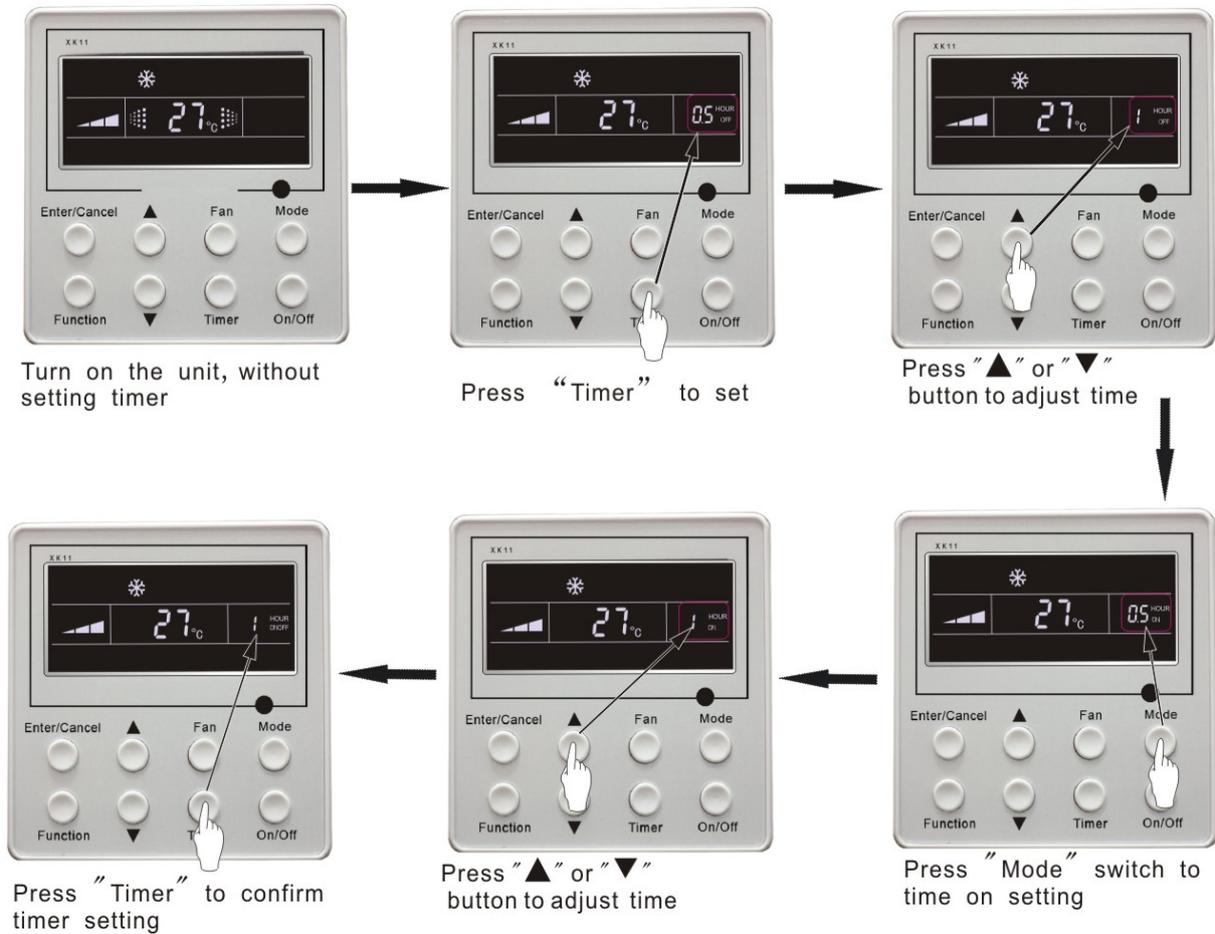


Fig.12 Timer setting under on state of the unit

Timer range: 0.5-24hr. Every press of ▲ or ▼ button will make setting time increased or decreased by 0.5hr. If press either of them continuously, setting time will automatically increase/decrease by 0.5hr every 0.5s.

Note:

1. If both timer on and timer off are set in unit on interface, the wired controller only display time of time off. If both of them are set in unit off-state, only time of timer on is displayed.
2. Timer on in unit on-state is timed from the time of time off and timer off in unit off-state is timed from the time of unit on.

4.7 Air Exchange Setting *

Turn on air Exchange function:

Under on-state of the unit, press **Function** button to go to the this function setting (**Air** mark blinks). **AIR 1** displayed at the ambient temperature-displayed location (888) is defaulted (the last type of **AIR** will be displayed after adjustment). Press ▲ or ▼ button to adjust air type. Press **Enter/Cancel** button to turn on/off air function. After turning on this function, the air mark shows.

There are 10 types of AIR, but only 1-2 types are for remote control. Refer to the following details:

- 1—The unit continuously runs for 60min, and fresh air valve runs for 6 min.
- 2—The unit continuously runs for 60min, and fresh air valve runs for 12 min.
- 3—The unit continuously runs for 60min, and fresh air valve runs for 18 min.
- 4—The unit continuously runs for 60min, and fresh air valve runs for 24 min.
- 5—The unit continuously runs for 60min, and fresh air valve runs for 30 min.
- 6—The unit continuously runs for 60min, and fresh air valve runs for 36 min.
- 7—The unit continuously runs for 60min, and fresh air valve runs for 42 min.
- 8—The unit continuously runs for 60min, and fresh air valve runs for 48 min.
- 9—The unit continuously runs for 60min, and fresh air valve runs for 54 min.
- 10—The unit continuously runs for 60min, and fresh air valve always runs.

Turn off air Exchange function: During Air function, press **Function** button to go to the Air function. In this case, **air** mark is blinking, and then press **Enter/cancel** button to turn off this function. Air mark will subsequently disappear.

Air Exchange setting is shown as in Fig.13:

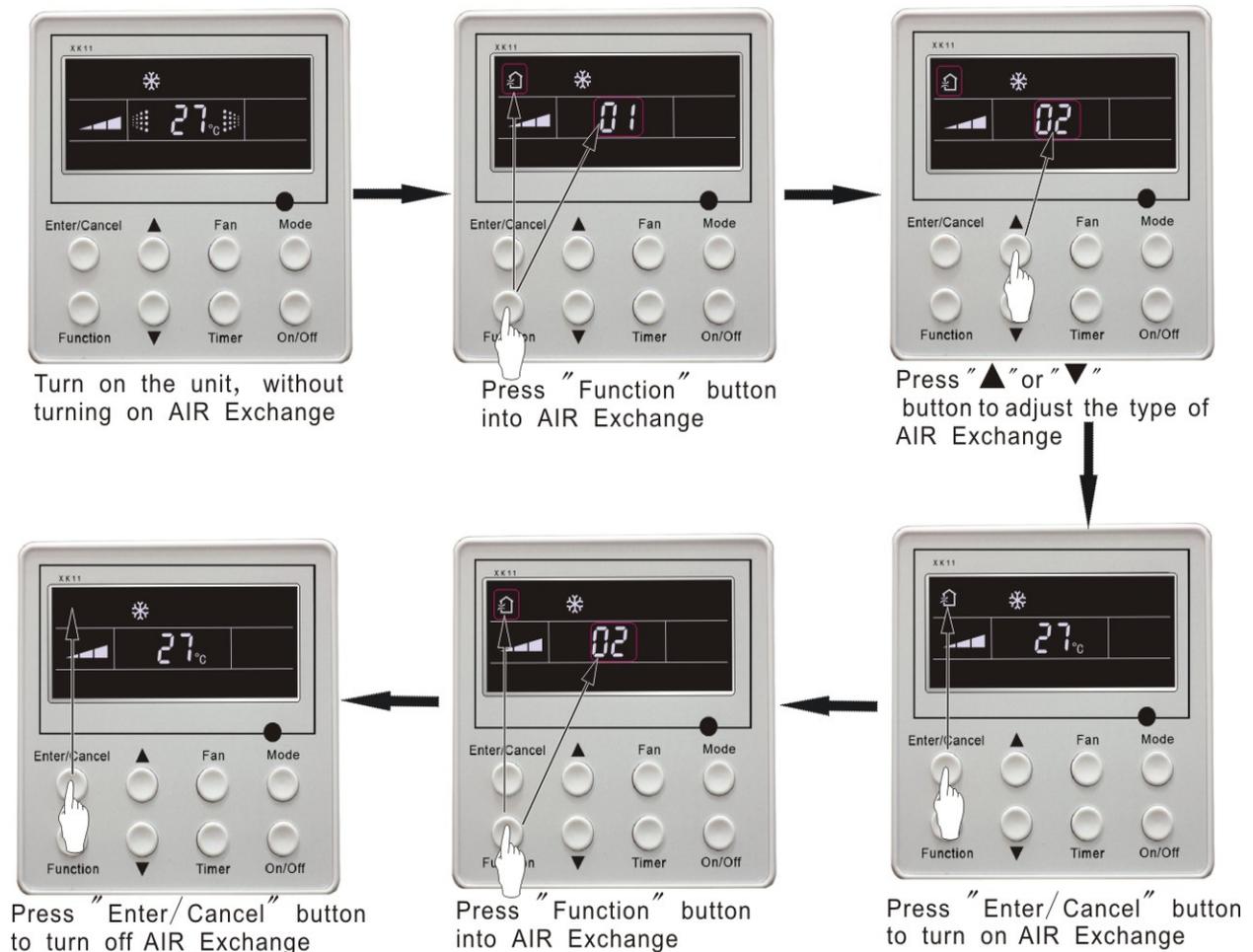


Fig.13 Air exchange device

Note: In air exchange mode, press **Function** button or there is not any operation within 5s after the last button operation, the system will be quit from **air exchange** setting and current energy-saving data won't be memorized.

4.8 Sleep Setting

Sleep on: Press **Function** button under on-state of the unit into sleep function and then press **Enter/cancel** button to turn on sleeping function.

Sleep off: During sleep on-state, press **Function** button to go to the sleep function and then press **Enter/cancel** button to turn off this function.

Sleep setting is shown as Fig.14:

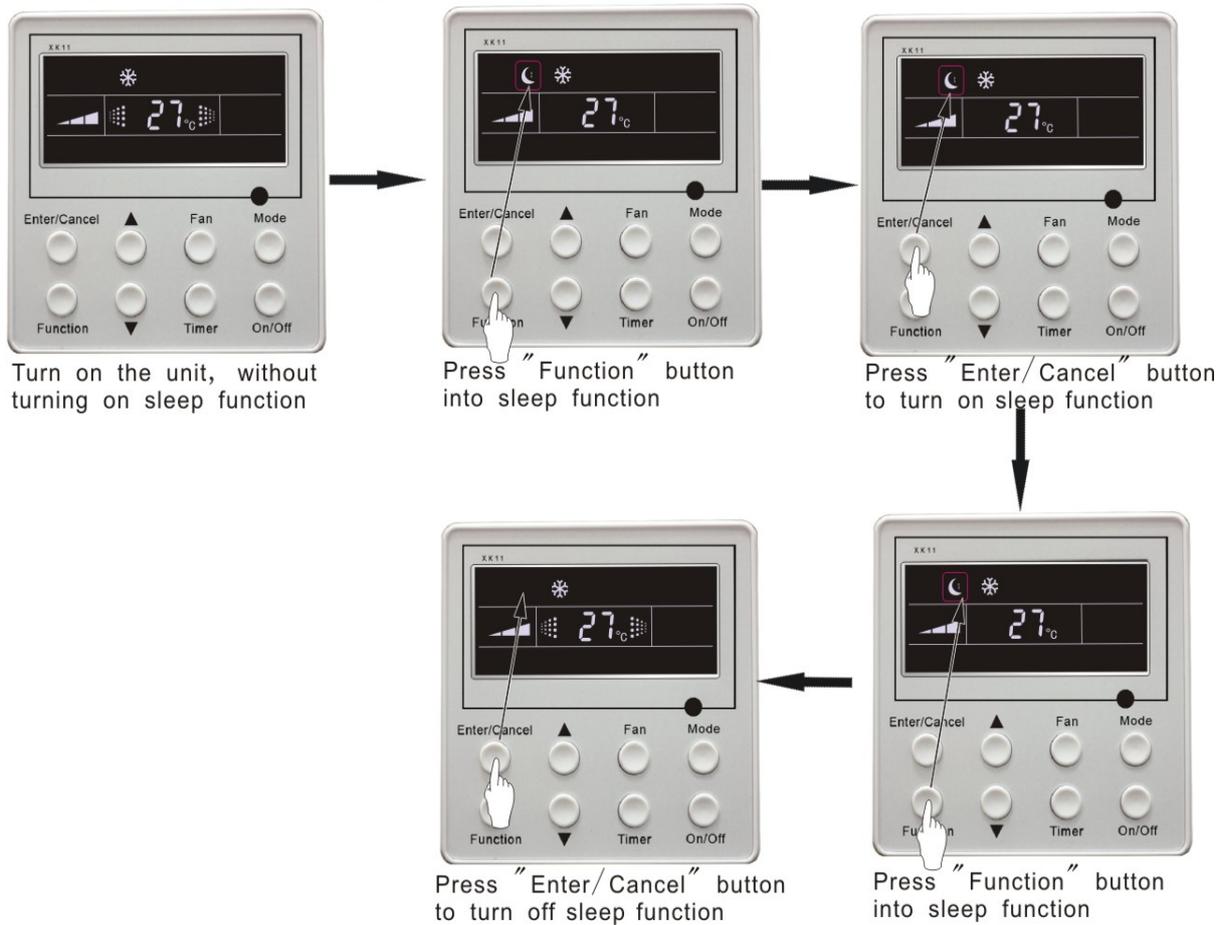


Fig.14 Sleep setting

Sleep setting is clear after power failure and then power recovery. There is not sleep function in fan and auto mode.

Note: In cooling and dry mode, if the unit with sleep function has run for 1 hour, the preset temperature will be increased by 1°C and 1°C in another 1 hour. After that, the unit will run at this temperature. In heating mode, if the unit with sleep function has run for 1 hour, the preset temperature will be decreased by 1°C and 1°C in another 1 hour. After that, the unit will run at this temperature.

4.9 Turbo Function Setting

TURBO function: The unit at high fan speed can realize quick cooling or heating so that room temperature can quickly approach setting temperature.

In cooling or heating mode, press **Function** button till the unit enters **TURBO** function and then press **Enter/cancel** button to turn on **TURBO** function.

During **TURBO** function, press **Function** button till the unit enters **TURBO** function and then press **Enter/cancel** button to cancel **TURBO** function.

TURBO function setting is shown in Fig.15 :

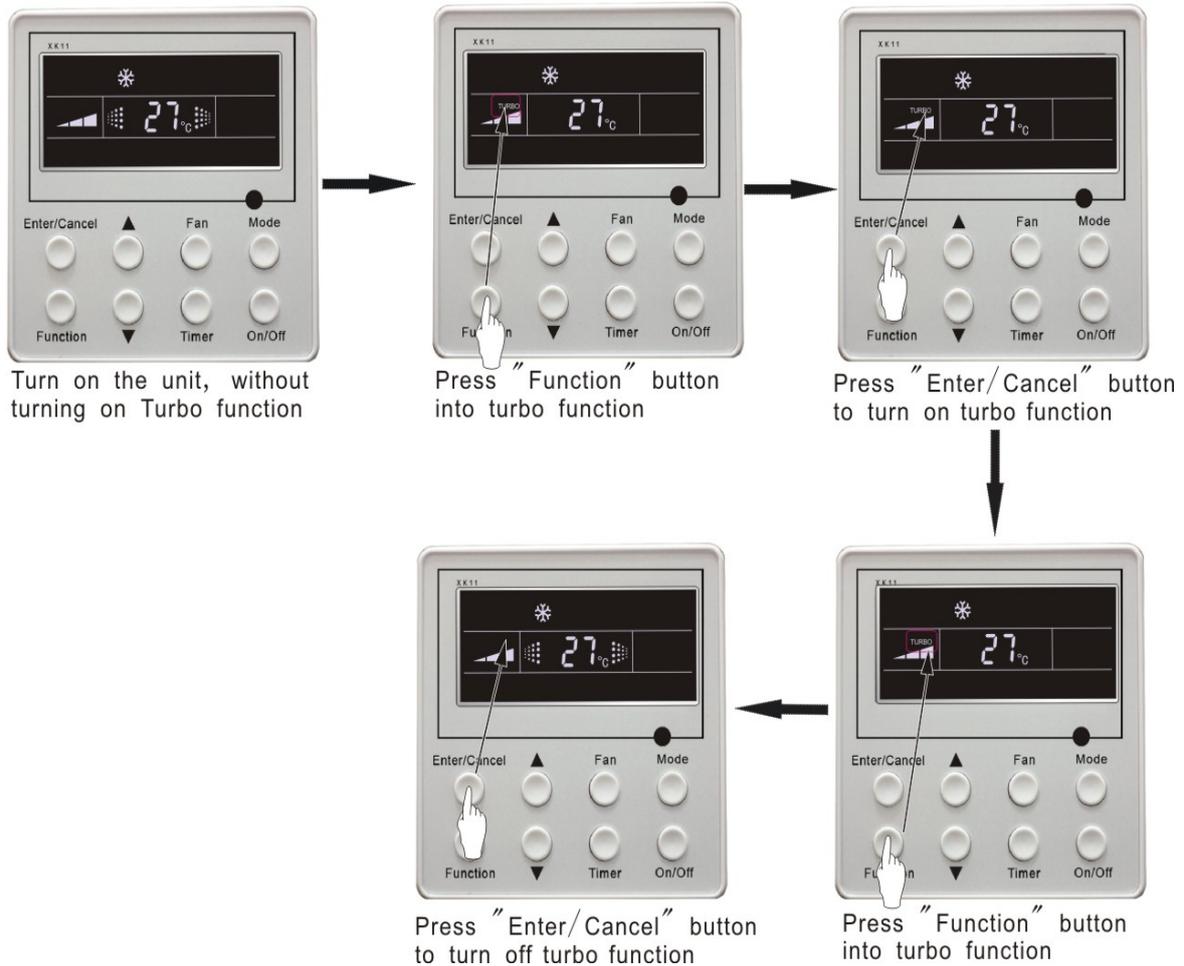


Fig.15 Turbo Function Setting

Note:

1. **TURBO** function will be turned off after power failure and then recovery. In dry, fan and auto mode, **TURBO** function can not be set and **TURBO** mark won't be displayed.
2. **TURBO** function will be automatically canceled after setting of quiet function.

4.10 SAVE Function Setting

Energy Saving Function: Energy saving can make the air conditioner runs in a smaller temperature range by setting lower limited value of setting temperature in cooling or dry mode and upper limited value in heating mode.

Energy Saving Setting for Cooling

Under on-state and in cooling or dry mode of the unit, press **Function** button into energy saving function, with **SAVE** blinking .Press ▲ or ▼ button to adjust lower limited value of setting temperature in cooling mode. After that press **Enter/Cancel** button to turn on energy saving function for cooling.

Energy Saving Setting for Heating

Under on state and in heating mode of the unit, press **Function** button into energy saving function, with **SAVE** blinking. Press **Mode** button into energy saving function for heating and then press **▲** or **▼** button to adjust upper limited value of setting temperature in heating mode. After that, press **Enter/Cancel** button to turn on energy saving function for heating.

After energy saving function is turned on, press **Function** button into energy saving function and press **Enter/cancel** to cancel this function.

The energy saving setting is shown in the Fig.16.

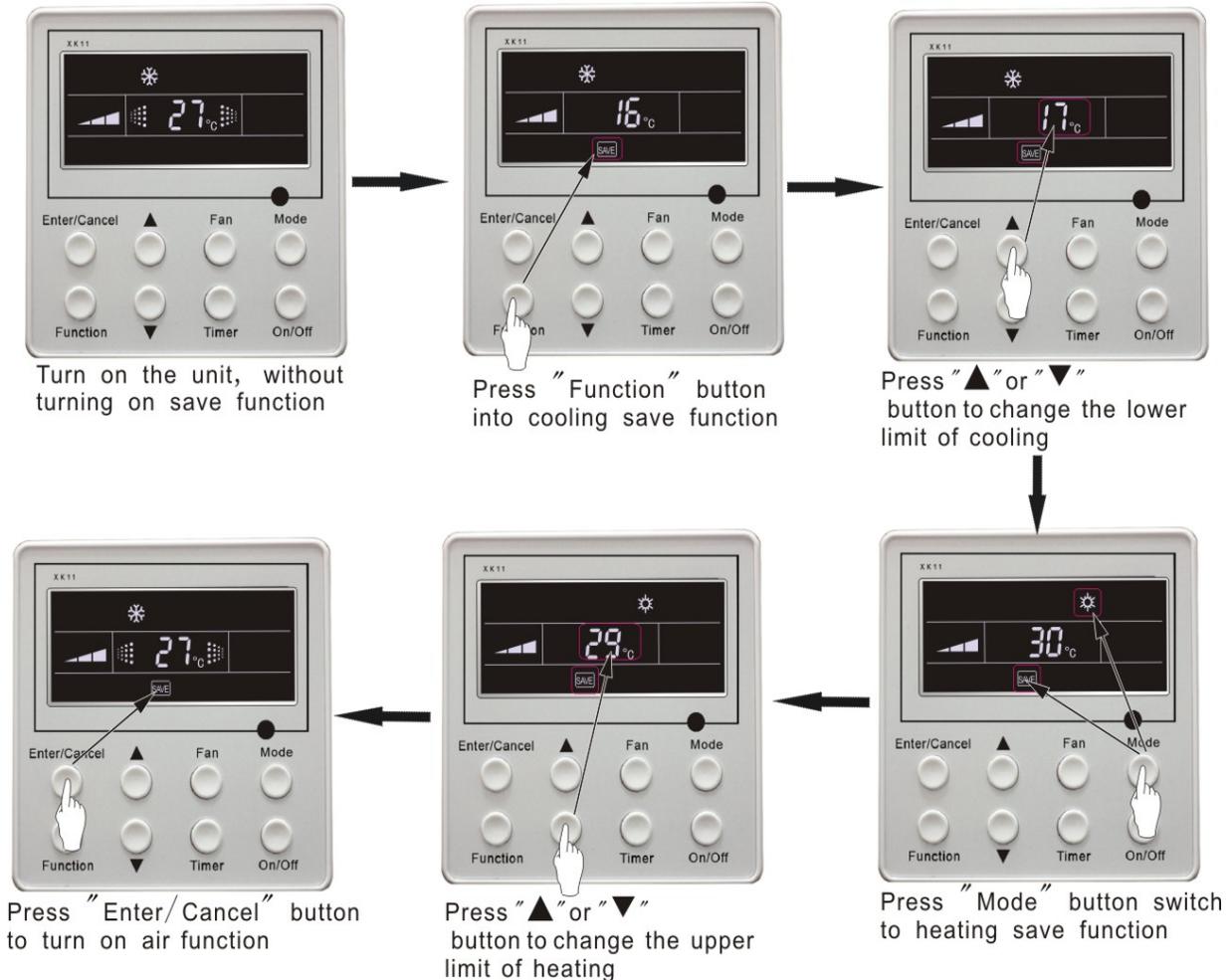


Fig.16 Energy Saving Setting

Note:

1. In Auto running mode with save function on, the unit will be forcibly quit Auto running Mode and change to current operation mode, After setting of save, sleep function will be canceled.
2. In save mode, if **Function** button is pressed or there is not any operation within 5s after the last button operation, the system will be quit from save function setting and current data won't be memorized.
3. After power failure and then recovery, save function setting will be memorized.
4. The lower limited value in cooling mode is 16°C and the upper limited value in heating mode is 30°C.
5. After save setting, if the setting temperature is out of the range in the mode, the limited value will prevail.

4.11 E-HEATER Setting *

E-HEATER: In the heating mode, E-heater is allowed to be turned on for improvement of efficiency. If heating mode is turned on by button operation, auxiliary electric heating function will be automatically turned on.

Press **Function** button in heating mode to go to the auxiliary electric heating function, the **E-HEATER** blinking, and press **Enter/cancel** button to turn on this function. In this case, the **E-HEATER** will be displayed, which means E-heater is allowed to be turned on.

If auxiliary electric heating function is on, press **Function** button to confirm or press **Enter/cancel** button to cancel. In this case, **E-HEATER** won't be displayed, which means E-heater is prohibited to be turned on.

The setting of this function is shown as Fig.17 below:

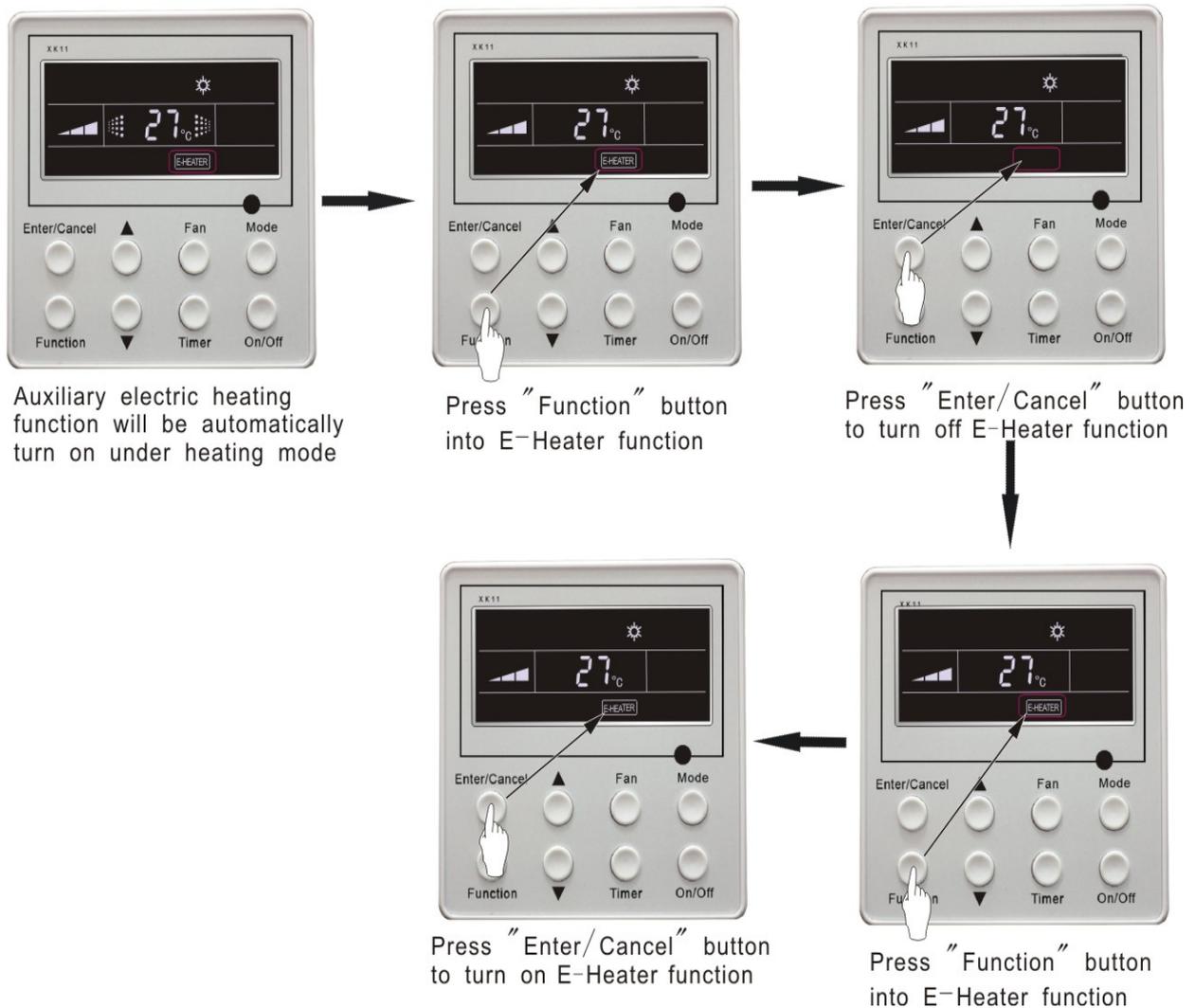


Fig.17 Auxiliary Electric Heating Function Setting

Note:

E-HEATER can not be set in cooling, dry and fan mode, **E-HEATER** mark won't be displayed. The setting is shown in Fig.17.

4.12 Blow Function Setting

BLOW function: After the unit is turned off, water in evaporator of indoor unit will be automatically evaporated to avoid mildew.

In cooling and dry mode, press **Function** button till the unit enters **BLOW** function, with **BLOW** blinking, and then press **Enter/cancel** button to turn on this function.

In BLOW mode, press **Function** button till the unit enters **BLOW** function and then press **Enter/cancel** button to cancel this function.

BLOW function setting is shown in Fig.18

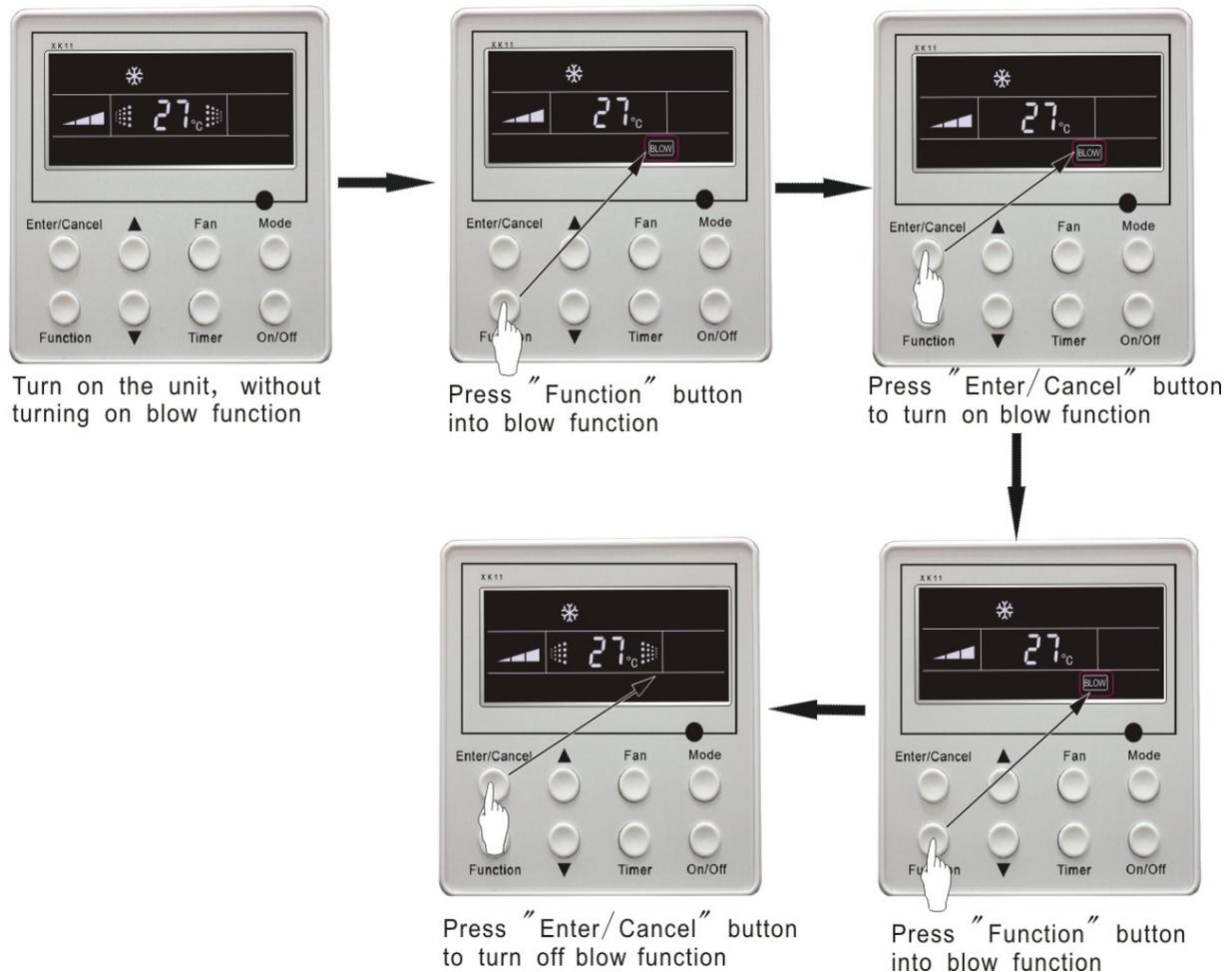


Fig.18 Blow function setting

Note:

1. After setting BLOW function, turn off the unit by pressing **On/Off** button on remote controller, indoor fan will run at low fan speed for 10 min. (**BLOW** shows). Meanwhile, if **BLOW** function is canceled indoor fan will be turned off directly.
2. There is not BLOW function in fan or heating mode.

4.13 Quiet Function Setting

Quiet function consists of two kinds: QUIET and AUTO QUIET.

Press **Function** button till the unit enters quiet function setting state, **Quiet or Auto Quiet** mark blinks. In this case, press **▲** or **▼** button to switch between Quiet and Auto Quiet and then press **Enter/cancel** button to turn on this function.

In quiet mode, press **Function** button till the unit enters quiet function. In this case, **Quiet or Auto Quiet** icon blinks and then press **Enter/cancel** button to cancel this function.

Quiet function setting is shown in Fig.19

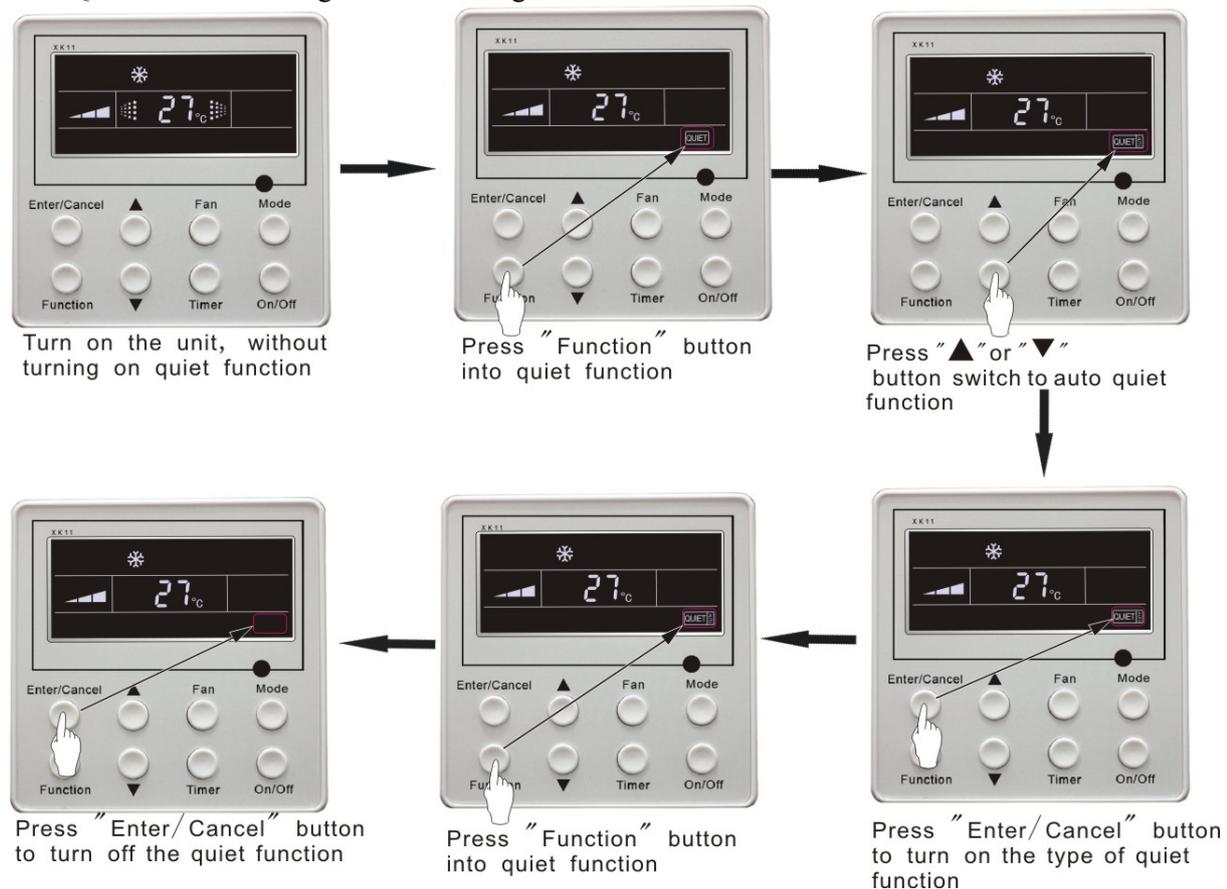


Fig.19 Quiet function setting

Note:

1. During quiet function, fan speed is un-adjustable.
2. When turning on auto quiet function, the unit will enter quiet running state according to temperature difference between room temperature and setting temperature. In this case, fan speed is adjustable. If temperature difference between room temperature and setting temperature $\geq 4^{\circ}\text{C}$, fan will keep its current speed; if $2^{\circ}\text{C} \leq \text{temperature difference} \leq 3$; fan speed will be reduced by one grade, but if it is at minimum grade, it is un-adjustable.; if temperature difference $\leq 1^{\circ}\text{C}$, fan speed will be at minimum grade
3. In auto quiet mode, fan speed can not be raised but reduced. If high fan speed is manually adjusted, auto quiet mode will quit.
4. There is not auto quiet function in fan or dry mode. Quiet off is default after power failure and then power recovery.
5. If quiet function is set, turbo function will be canceled.

4.14 Field Functions

Under off-state of the unit, press **Function** and **Timer** buttons continuously for 5s to go to the debugging menu. Press **Mode** button to adjust the setting items and ▲ or ▼ button to set the actual value.

4.14.1 Ambient Temperature Sensor Setting

In field setting mode, press **Mode** button to adjust the temperature displayed location displaying 00, and press ▲ or ▼ button to adjust setting state at timer displayed location. There are 3 types for selection:

Indoor ambient temperature is that at return air inlet (01 is displayed at timer displayed location)

Indoor ambient temperature is that at the place of screen (02 is displayed at timer displayed location)

Return air inlet temperature sensor shall be selected for cooling, dry and fan modes and wired controller temperature sensor (03 is displayed at timer displayed location) shall be selected for heating and auto modes.

4.14.2 Three Grades of Speed for Indoor Fan

In field setting mode, press **Mode** button to adjust the temperature displayed location displaying 01 and press ▲ or ▼ button to adjust setting state at timer displayed location. There are 2 types for selection:

3 low grades (LCD displays 01)

3 high grades (LCD displays 02)

Three low grades indicate high, medium and low grades and 3 high grades indicate super-high, high and medium grades.

Press **Enter/Cancel** button to save the setting and quit after setting. If there is not any operation within 20s after the system responds to the last button operation in this interface, the system will quit this menu and display normal off-state; meanwhile, current setting won't be saved.

4.15 Other Functions

4.15.1 Lock Function

Upon startup of the unit without malfunction or under off-state of the unit, press ▲ and ▼ buttons at the same time for 5s till the wired controller enters lock state. In this case, LCD displays: . After that, repress these two buttons at the same time for 5s to quit lock state.

Under lock state, any other buttons won't give any response to the press.

4.15.2 Memory Function

Memory switchover: Under off-state of the unit, press **Mode** and ▲ buttons at the same time for 5s to switch memory modes. During setting memory mode, **Memory** will be displayed. If this function is not set, the unit will be under off state after power failure and then power recovery.

Memory recovery: If memory mode has been set for wired controller, the wired controller after power failure will resume its original running state upon power recovery.

Note:

It will take about 5 seconds to save all the information, therefore, please do not cut down the power at this time, or it may fails.

4.15.3 Enquiry of Outdoor Ambient Temperature

Under on or off state of the unit, press **Enter/Cancel** button for 5s, outdoor ambient temperature will be displayed at temperature displaying location after a sound of click. This enquiry state will quit by pressing any button. If there is not any operation for 20s, it will automatically quit.

Note:

1. This function will be shielded after energization of 12hr for some models of the units without outdoor ambient sensors. Please refer to Instruction for details.
2. If malfunction of outdoor ambient sensor occurs, this function will be shielded in 12hr.

4.15.4 Selection of Centigrade and Fahrenheit

Under off state of the unit, press Mode and ▼ at the same time for 5s, the displayer panel will switch between Centigrade and Fahrenheit.

4.15.5 Master/Slave Wired Controller Setting

Under the off status of the unit, press “Enter/cancel” and “Mode” at the same time for 5 seconds to go to the master/slave wired controller setting interface, and then press ▲ or ▼ to make the adjustment. In this case, only in the temperature display is there numbers displayed, 01 for the master wired controller and 02 for the slave wired controller.

After that, press “Enter/cancel” to save the setting and quit this interface. If there is not any operation in 20 seconds on this interface after the last button press, the system will quit automatically to the normal off status without saving the current setting.

Note: If there is only one wired controller, it only can be set as the master; otherwise the unit won't run normally.

4.15.6 Gate-control Display Function *

If there is gate control system, the unit can run after plugging in card and stop after pulling out the card.

If memory function is on, the unit after plugging out of card and then plugging in will run according to the memory. If the card is not plugged in (or poor plugging), the mark  will show and the unit will be turned off.

If memory function is off, the unit after plugging out the out will be turned off and the mark  will show. If re-plugging in the card, the mark will disappear and the unit enter will enter off state.

Note:

1. During long-distance monitoring, the unit on /off cannot be controlled by the card, but the mark  will also show after plugging in the card.
2. The unit cannot be controlled by button operation after plugging out the card.

V Error Display

If there is malfunction during running of the system, LCD will display error code at temperature–displayed location. Once there is more than one malfunction, error codes will be displayed circularly. If there are multiple circuit systems, the system number of failed system will be displayed before the colon (not for single system).

If malfunction occurs, turn off the unit and contact nearest dealer for help.

As shown in Fig.20, it means high pressure protection of system 2 under unit on.



Fig.20

Table 3

Error code meaning:

Error code	Malfunction
E1	High pressure protection of compressor
E2	Indoor anti-freezing protection
E3	Low pressure protection of compressor
E4	High discharge temperature protection of compressor
E5	Compressor overload protection
E6	Communication malfunction
E9	Water overflow protection
F0	Indoor unit ambient sensor malfunction at air return opening
F1	Evaporator sensor malfunction
F2	Condenser sensor malfunction
F3	Outdoor unit ambient temperature sensor malfunction
F4	Discharge temperature sensor malfunction

F5	Ambient sensor malfunction on Displayer (or LED board)
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Definition of Malfunction Codes of DC Inverter General Outdoor Unit

V1.6

Table 4

Malfunction Item	Outdoor unit display of dual 8	Outdoor unit display of LED indicators						Indoor Unit Display
		LED6	LED5	LED4	LED3	LED2	LED1	
DC busbar over voltage protection	PH	Bright	Blink	Bright	Bright	Bright	Bright	E5
Radiating fin	P8	Bright	Blink	Bright	Bright	Bright	Blink	E5
Current sensor	Pc	Bright	Blink	Bright	Bright	Blink	Bright	E5
Radiator sensor	P7	Bright	Blink	Bright	Blink	Bright	Bright	E5
Compressor	P5	Bright	Blink	Bright	Blink	Bright	Blink	E5
DC busbar under	PL	Bright	Blink	Bright	Blink	Blink	Bright	E5
Compressor	Lc	Bright	Blink	Dark	Bright	Bright	Bright	E5
PFC abnormal	Hc	Bright	Blink	Dark	Bright	Bright	Dark	E5
Compressor	LE	Bright	Blink	Dark	Bright	Bright	Blink	E5
Drive resetting	P0	Bright	Blink	Dark	Bright	Dark	Bright	E5
The compressor	H7	Bright	Blink	Dark	Bright	Dark	Dark	E5
Driver board in	Ld	Bright	Blink	Dark	Bright	Dark	Blink	E5
Fault from	P6	Bright	Bright	Dark	Dark	Dark	Blink	E5
IPM module	H5	Bright	Blink	Blink	Bright	Bright	Bright	E5
Compressor over	LF	Bright	Blink	Blink	Bright	Bright	Dark	E5
Sensor connection	Pd	Bright	Blink	Blink	Bright	Bright	Blink	E5
Temperature drift	PE	Bright	Blink	Blink	Bright	Dark	Bright	E5
AC contactor	P9	Bright	Blink	Blink	Bright	Dark	Dark	E5
AC current	PA	Bright	Blink	Bright	Blink	Bright	Dark	E5
Driver board	PF	Bright	Blink	Bright	Blink	Dark	Bright	E5
High-pressure	E1	Bright	Blink	Dark	Dark	Dark	Blink	E1
Low-pressure	E3	Bright	Blink	Dark	Dark	Blink	Dark	E3
Exhaust protection	E4	Bright	Blink	Dark	Dark	Blink	Blink	E4
Compressor	H3	Bright	Blink	Dark	Blink	Dark	Dark	E5
Communication	E6	Bright	Blink	Dark	Blink	Blink	Dark	E6
Outdoor	F3	Bright	Blink	Blink	Dark	Dark	Dark	F3
Indoor coil middle	F2	Bright	Blink	Blink	Dark	Blink	Dark	F2
Variable-frequency	F4	Bright	Blink	Blink	Blink	Dark	Blink	F4
Defrost	08	Bright	Blink	Dark	Blink	Blink	Blink	Defrost
Oil return	09	Bright	Blink	Blink	Blink	Bright	Blink	No

Mismatch of indoor unit model	LP	Bright	Blink	Dark	Blink	Bright	Blink	No display
AC input voltage abnormality *	PP							E5
Electrification loop malfunction *	PU							E5

VI Remote control operation procedure(standard fitting)

Names and Functions of Remote Controller Keys

Precautions:

- This remote controller is a general-purpose remote controller, which can be used in various types (functions) air conditioner. The keys not applicable to this air conditioner are not explained here.
- Ensure there is no obstacle between the remote controller and the signal receiving window of the air conditioner.
- The distance able to receive the signal of the remote controller can be as far as 8 meters.
- Never drop or throw at will the remote controller.
- Never let any liquid enter the remote controller. Avoid direct sunshine over the remote controller. Do not place the remote controller in an extremely hot place.

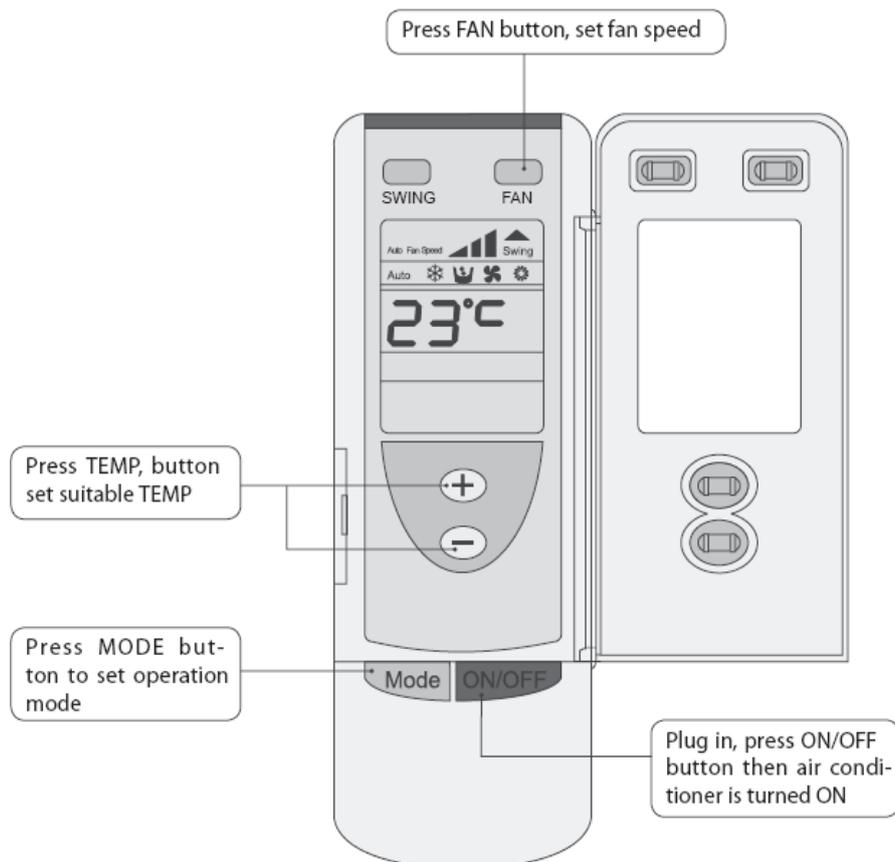


Fig.21

Cooling Mode Operation

Connect the unit to power supply. Press the "ON/OFF" key. Press the "MODE" key to select "Cooling" mode. Use the "Temperature" key to adjust the set temperature for the room. Refer to Fig.22.

Heating Mode Operation

Connect the unit to power supply. Press the "ON/OFF" key. Press the "MODE" key to select "Heating" mode. Use the "Temperature" key to adjust the set temperature for the room. Refer to Fig.23.

Under the heating mode, the unit has the functions of preventing cold air supply and supplying remaining heat. After the startup of the compressor, the indoor fan shall start operation when the evaporator temperature is larger or equals 35 or after the unit has be started for 45 seconds, so as to avoid supply of cold air shortly after the unit is started. After the stop of the compressor, the indoor fan shall stop operation after supplying air for 120 seconds.

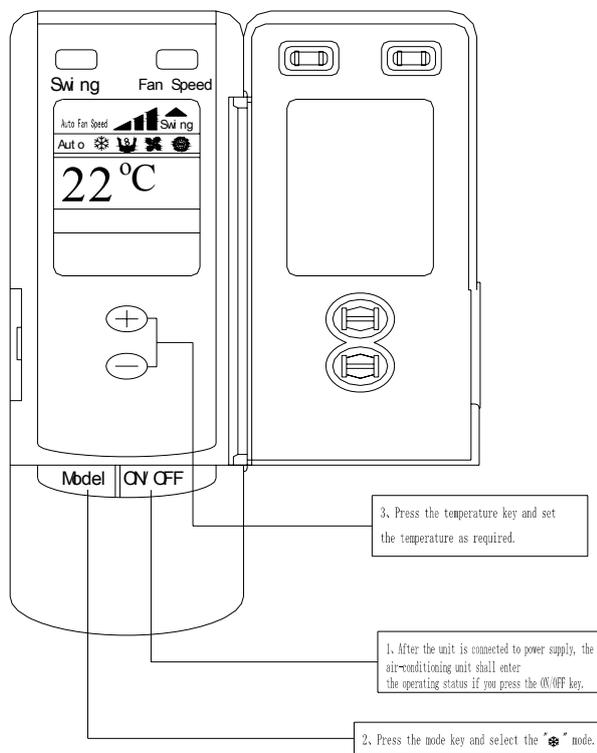


Fig.22 Cooling Mode Operation

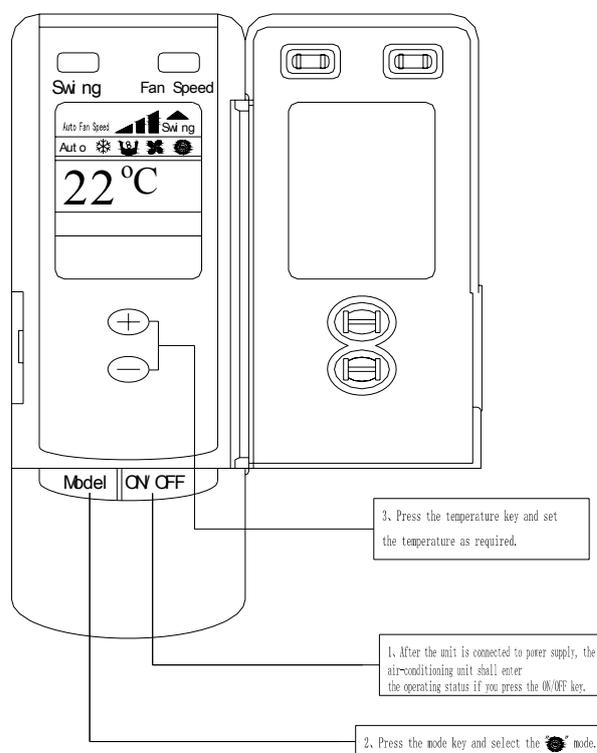


Fig.23 Heating Mode Operation

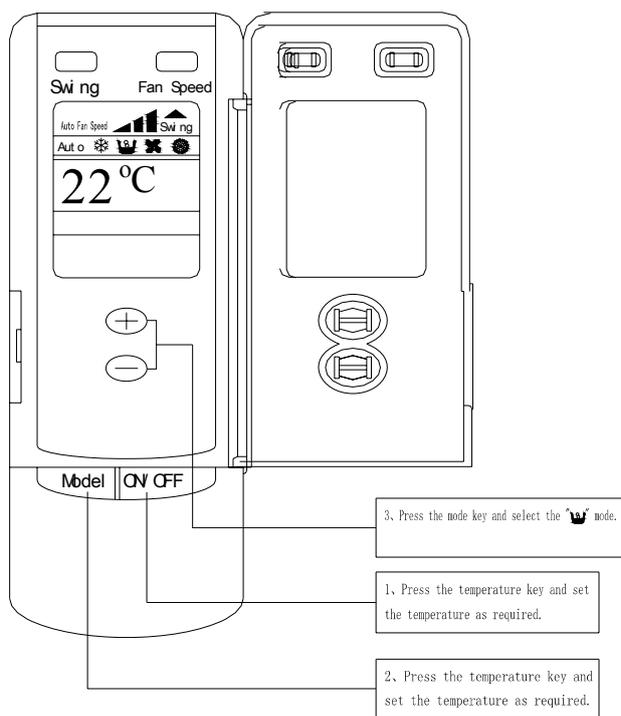


Fig.24 Dehumidifying Mode Operation

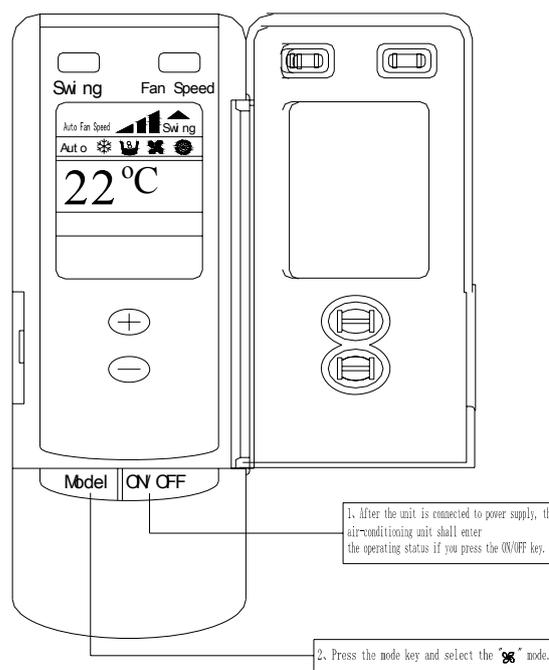


Fig.25 Fan Mode Operation

DRY (Dehumidifying) Mode Operations

Connect the unit to power supply. Press the “ON/OFF” key. Press the “MODE” key to select “DRY (Dehumidifying)” mode. Use the “Temperature” key to adjust the set temperature for the room. Refer to Fig.24.

Fan Mode Operation

Connect the unit to power supply. Press the “ON/OFF”key. Press the “MODE” key to select “FAN” mode. The unit shall operate under “FAN” mode. Press the “FAN” key to select from high, medium and low speed. Refer to Fig.25.

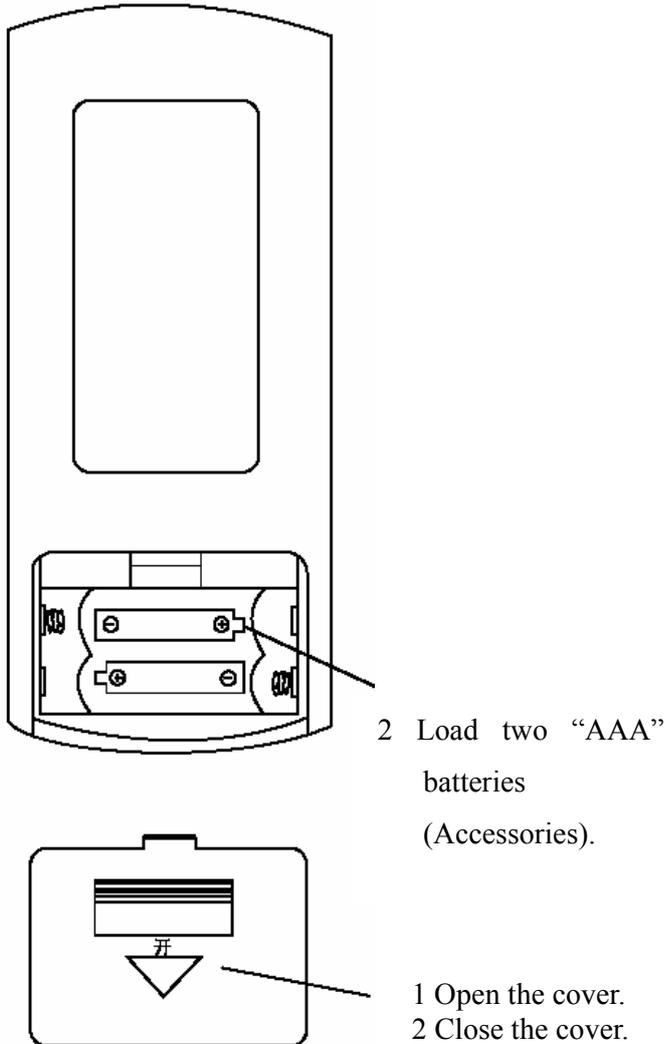


Fig.26 Replacing Batteries for Remote
Loading Batteries Into Remote Controller

Refer to Fig.26 for the methods and steps of installing batteries into the remote controller.

- After batteries are installed, the display shall display icons and letter codes of all functions.
- The life of batteries is about 1 year.
- Do not mix new and old batteries or mix different types of batteries in usage.
- If the remote controller shall not be used for a long time, take out the batteries to avoid liquid leakage and any subsequent failure.

VII Unit Function

7.1 Setting of Double Indoor Room Sensors

This series of ducted air-conditioning unit has two indoor room sensors. One is located at the air intake of the indoor unit and the other one is located inside the wire controller.

User can select one from the two indoor room sensors on the basis of the engineering requirement. (Refer to the section of wire controller instructions for detailed operation.)

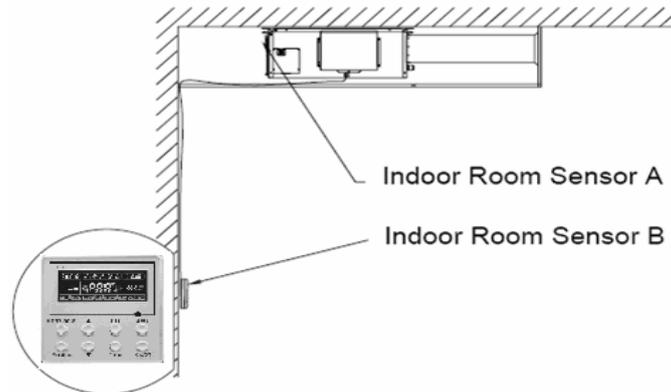


Fig.27

7.2 Checking of Outdoor Ambient Temperature

The outdoor ambient temperature can be checked on the wire controller for the convenience of users before going out. (Refer to the section of wire controller instructions for detailed operation.)

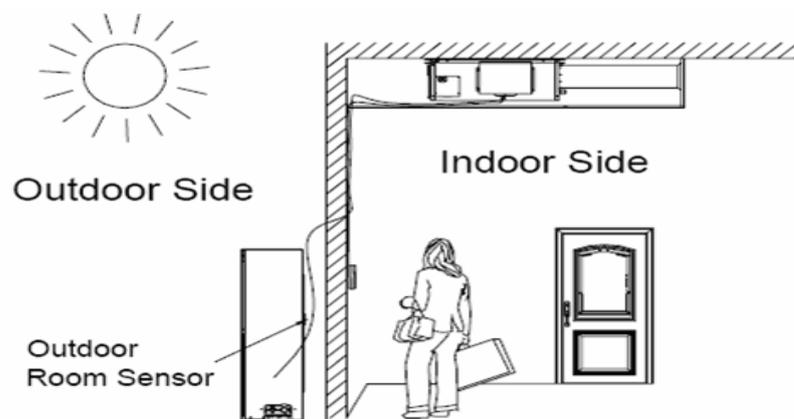


Fig.28

7.3 Fresh Air Control

11-levels control can be realized for the amount of fresh air taken in. The function not only facilitates the health of users, but also controls the electricity consumption loss because of taking in fresh air. This kind of control can be carried out through the wire controller. The function can set at any time, goes into effect at any time, and features very simple operation. (Refer to the section of wire controller instructions for detailed operation.)

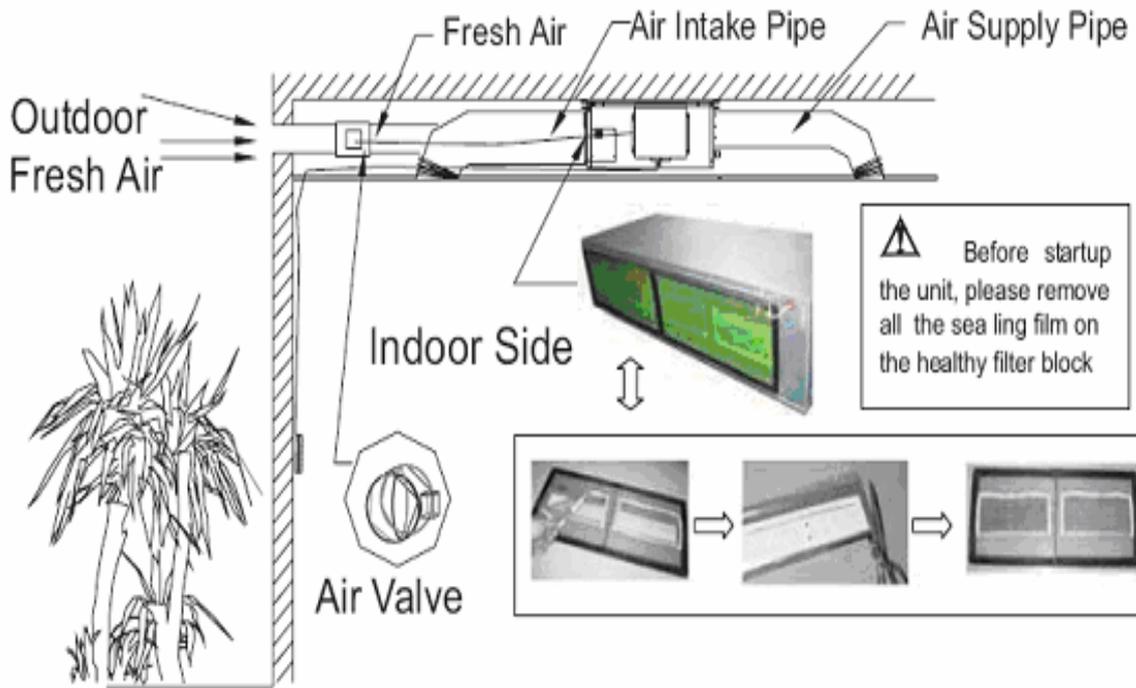


Fig.29

The head of delivery of the condensate drainage pump can reach 1.1m, so that the engineering installation is very convenient and prompt.

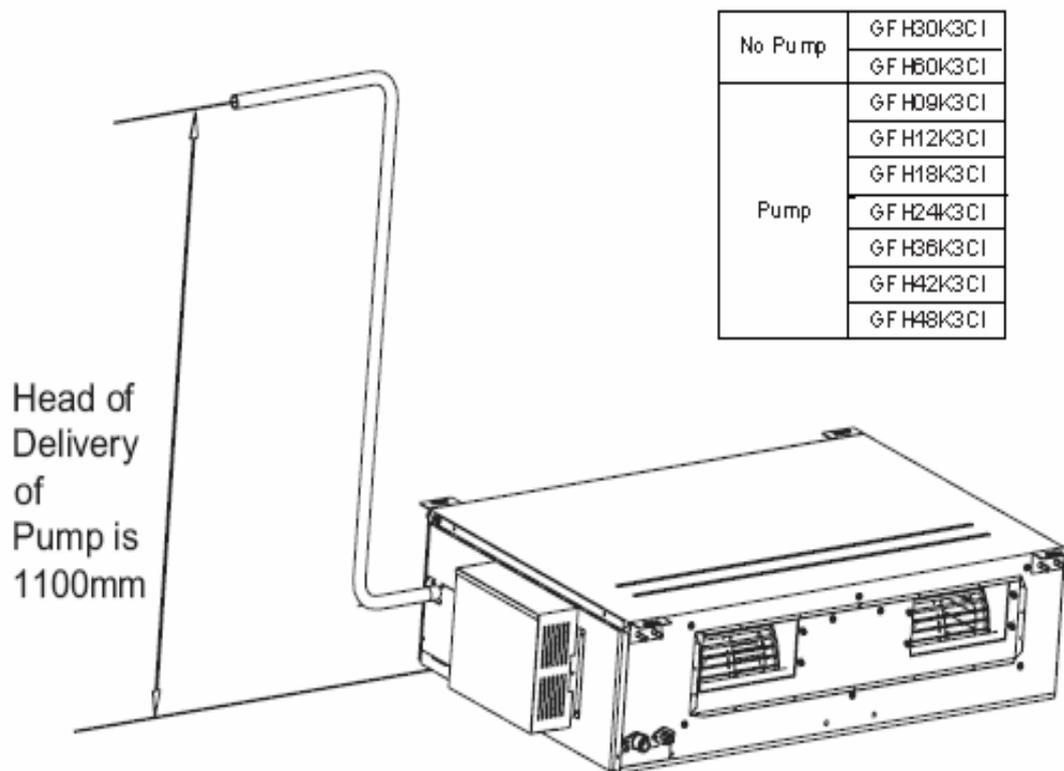


Fig.30