Split Air Conditioner

Owner's Manual
Residential Air Conditioners

Thank you for choosing Residential Air Conditioners, please read this owner's manual carefully before operation and retain it for future reference.

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Never attempt.



Be sure to follow this instruction

The physical product may differ from the drawing in this manual for different display. If there are some differences between them, please refer to the physical product as the standard.

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.

Children should be supervised to ensure they are away from the appliance.



This marking indicates that this product should not be disposed with other household wastes throughout the EU. To prevent possible harm to the environment or human health from uncontrolled waste disposal, recycle it responsibly to promote the sustainable reuse of material resources. To return your used device, please use the return and collection systems or contact the retailer where the product was purchased. They can take this product for environmental safe recycling.

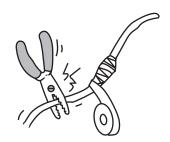
Please read the following carefully before operating

★ When the voltage is very high, the components would be easily damaged, when the voltage is very low, the compressor vibrates terribly and that the refrigerant system will be damaged, the compressor and electric components cannot work, the voltage should be stable; there shouldn't be big fluctuation.

★ Be sure to pull out the power plug as the air conditioner not in use for a long time.

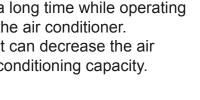
Otherwise, the accumulated dusts that may cause over heating or fire.

★ Never splice the power cord or use an extended cord.



It can cause overheating or fire.

★ Don't leave windows and doors open for a long time while operating the air conditioner. It can decrease the air conditioning capacity.

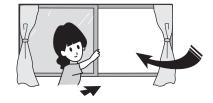


★ Don't block the air intake or outlet vents of both the outdoor and indoor

It can decrease the air conditioning capacity or cause a malfunction.



★ The power supply must adopt the special circuit that with air switch protection and assure it has enough capacity. The unit will be turned on or off according to your requirement automatically, please do not turn on or turn off the unit frequently, otherwise disadvantage effect may be caused to the unit.



★ When having a burning smell or smoke, please turn off the power supply and contact with the service center.



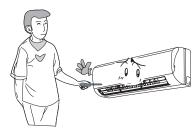
If the abnormity still exists, the unit may be damaged, and may cause electric shock or fire.

★ Keep combustilble spray away from the units more than 1m.



It can cause a fire or explosion

★ Don't attempt to repair the air conditioner by yourself.



The wrong repair will lead to an electric shock or fire, so you should contact the service center to repair.

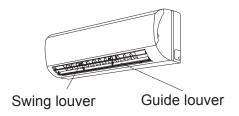
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Notices for operation

★ Please don't cut off or damage the power cords and control cords.

If they are damaged, please ask the qualified personnel to change them.

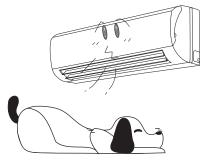
★ To adjust the airflow direction appropriately. When operating the unit, to adjust the vertical and lateral air flow direction by use of remote controller.



► Don't insert your hands or stick into the air intake or outlet vents.



★ Don't blow the wind to animals and plants directly. It can cause a bad influence to them.

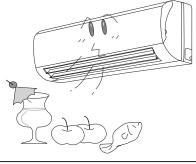


★ Don't apply the cold wind to the body for a long time.

It can cause the health problems.



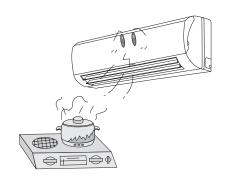
★ Don't use the air conditioner for other purposes, such as drying clothes, preserving foods, etc.



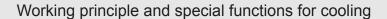
★ Splashing water on the air conditioner can cause an electric shock and malfunction.



★ Don't place a space heater near the air conditioner.



Notices for use



Principle:

Air conditioner absorbs heat in the room and transmit to outdoor and discharged, so that indoor ambient temperature decreased, its cooling capacity will increase or decrease by outdoor ambient temperature.

Anti-freezing function:

If the unit is running in COOL mode and in low temperature, there will be frost formed on the heat exchanger, when indoor heat exchanger temperature decreased below 0°C, the indoor unit microcomputer will stop compressor running and protect the unit.

Working principle and special functions for heating

Principle:

- * Air conditioner absorbs heat from outdoor and transmits to indoor, in this way to increase room temperature. This is the heat pump heating principle, its heating capacity will be reduced due to outdoor temperature decrease.
- * If outdoor temperature becomes very low, please operate with other heating equipments.

Defrosting:

- * When outdoor temperature is low but high humidity, after a long while running, frost will form on outdoor unit, that will effect the heating effect, at this time, the auto defrosting function will act, the heat running will stop for 8-12mins.
- * During the auto defrosting, the fan motors of indoor unit and outdoor unit will stop.
- * During the defrosting, the indoor indicator flashes, the outdoor unit may emit vapor. This is due to the defrosting, it isn't malfunction.
- * After defrosting finished, the heating will recover automatically.

Anti-cool wind function:

In "Heat" mode, under the following three kinds of state, if indoor heat exchanger doesn't arrive at certain temp., indoor fan will not act, in order to prevent cool wind blowing (within 2 mins):

1. Heating starts. 2. After Auto Defrost finished. 3. Heating under the low temperature.

Rest Heat Blow

In the following situations, the indoor unit may still run for some time, to blow out the rest heat of the indoor unit and the horizontal louver rotates to a certain position.

- 1. In HEAT mode, the temperature reaches the setting value, the compressor stops and the indoor fan still run for 60s.
- 2. In HEAT mode, if you turn off the unit, the compressor stops and the indoor fan still run for 10s.

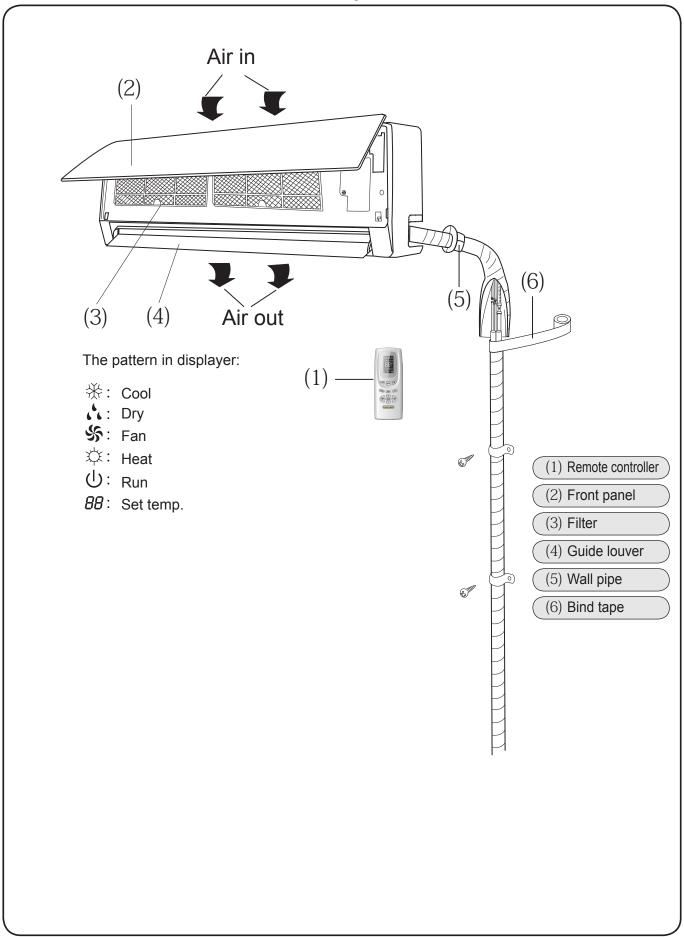


Notices for use

Working temperature range				
	Indoor sideDB/WB(°C)	Outdoor sideDB/WB(°C)		
Maximum cooling	32/23	43/26		
Maximum heating	27/–	24/18		

The operating temperature range (outdoor temperature) for cooling only unit is 18°C~ 43°C; for heat pump unit is -7°C~ 43°C.

◆ Names and functions of each part



Name and function of wireless remote control

Note: Besure that there are no obstructions between receiver and remote controller; Don't drop or throw the remote control; Don't let any liquid in the remote control and put the remote control directly under the sunlight or any place where is very hot.

Signal transmitter



Remote control

ON/OFF

ON/OFF button

 Press this button, the unit will be turned on, press it once more, the unit will be turned off.
 When turning on or turning off the unit, the Timer, Sleep function will be canceled, but the presetting time is still remained.

MODE

MODE button

 Press this button, Auto, Cool,Dry, Fan, Heat mode can be selected circularly. Auto mode is default while power on. Under Auto mode,the temperature will not be displayed; Under Heat mode, the initial value is 28°C (82°F); Under other modes, the initial value is 25°C (77°F).



<equation-block> HEAT

(Only for cooling and heating unit. As for cooling only unit, it won't have any action when it receives the signal of heating operation.)

SLEEP

SLEEP button

 Press this button, Sleep On and Sleep Off can be selected. After powered on, Sleep Off is defaulted. After the unit is turned off, the Sleep function is canceled. After Sleep function set up, the signal of Sleep will display. In this mode, the time of timer can be adjusted. Under Fan and Auto modes, this function is not available.

FAN

FAN button

 Press this button, Auto, Low, Middle, High speed can be circularly selected. After powered on, Auto fan speed is default. Under DRY mode, Low fan speed only can be set up.



CLOCK

CLOCK button



Names and functions of wireless remote control

Notice: This is a general use remote controller, it could be used for the air conditioners with multifunction; For some function, which the model dosen't have, if press the corresponding button on the remote controller that the unit will keep the original running status.



Remote control

X-FAN

X-FAN button

PressingX-FAN button in COOL or DRY mode, the icon is displayed and the indoor fan will continue operation for 10 minute in order to dry the indoor unit even though you have turned off the unit. After energization, X-FAN OFF is defaulted.
 X-FAN is not available in AUTO, FAN or HEAT mode.

Note: X-FAN is the alternative expression of BLOW for the purpose of understanding.

TURBO

TURBO button

 In Cool or Heat mode, press this button can turn on or turn off the Turbo function.
 After turned on the Turbo function, its signal will be displayed. When switching the mode or changing fan speed, this function will be canceled automatically.

+ button

For presetting temperature increasing. Press this button,can set up the temperature, when unit is on. Continuously press and hold this button for more than 2 seconds, the corresponding contents will be changed rapidly, until unpress the button then send the information, °C (°F) is displaying all along. In Auto mode, the temperature can not be set up, but operate this button can send the signal. Centigrade setting range :16-30; Fahrenheit scale setting range 61-86.

- button

Presetting temperature can be decreased. Press this button, the temperature can be set up, continuously press this button and hold for two seconds, the relative contents can quickly change, until unhold this button and send the order that the °C (°F) signal will be displayed all the time. The temperature adjustment is unavailable under the Auto mode, but the order can be sent by if pressing this button.

LIGHT

LIGHT button

 Press this button at unit On or Off status, Light On and Light Off can be set up.
 After powered on, Light On is defaulted.

Names and functions of wireless remote control

Notice: This is a general use remote controller, it could be used for the air conditioners with multifunction; For some function, which the model dosen't have, if press the corresponding button on the remote controller that the unit will keep the original running status.

FAN AD AR AND SEEP USINT TIMER GLOCK TIMER OFF (X-FAN ON/OFF)

Remote control

 \geqslant

SWING UP AND DOWN BUTTON

 Press this button, to set up swing angle, which circularly changes as below:

This is an universal use remote controller. If remote controller sends the following three kinds of status that the swing status of main unit will be: ≱I

When the guide louver start to swing up and down, if turn off the Swing, the air guide louver will stop at current position.

which indicates the guide louver swings up and down between that all five positions.

TIMER ON

TIMER ON BUTTON

• Timer On setting: Signal "ON" will blink and display, signal @ will conceal, the numerical section will become the timer on setting status. During 5 seconds blink, by pressing + or - button to adjust the time value of numerical section, every press of that button, the value will be increased or decreased 1 minute. Hold pressing + or - button, 2 seconds later, it quickly change, the way of change is: During the initial 2.5 seconds, ten numbers change in the one place of minute, then the one place is constant, ten numbers change in the tens place of minute at 2.5 seconds speed and carry. During 5s blink, press the Timer On button, the timer setting succeeds. The Timer On has been set up, repress the timer On button, the Timer On will be canceled. Before setting the Timer, please adjust the Clock to the current actual time.

TIMER OFF

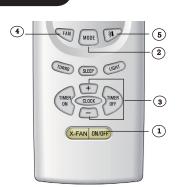
TIMER OFF BUTTON

 Once press this key to enter into TIMER OFF setup, in which case the TIMER OFF icon will blink.
 The method of setting is the same as for TIMER ON.



Guide for operation-general operation

- 1. After powered on, press ON/OFF button, the unit will start to run.(Note: When it is powered on, the guide louver of main unit will close automatically.)
- 2. Press MODE button, select desired running mode.
- 3. Pressing + or button, to set the desired temperature. (It is unnecessary to set the temp. at AUTO mode.)
- 4. Pressing FAN button, set fan speed, can select AUTO FAN, LOW, MID and HIGH.
- 5. Pressing | button, to select the swing.



Guide for operation- Optional operation

- 1. Press SLEEP button, to set sleep.
- 2. Press TIMER ON and TIMER OFF button, can set the scheduled timer on or timer off.
- 3. Press LIGHT button, to control the on and off of the displaying part of the unit. (This function may be not available for some units)
- 4. Press TURBO button, can realize the ON and OFF of TURBO function.



Introduction for special function

★ About X-FAN function

This function indicates that moisture on evaporator of indoor unit will be blowed after the unit is stopped to avoid mould.

- 1. Having set X-FAN function on: After turning off the unit by pressing ON/OFF button indoor fan will continue running for about 10 min. at low speed. In this period, press X-FAN button to stop indoor fan directly.
- 2. Having set X-FAN function off: After turning off the unit by pressing ON/OFF button, the complete unit will be off directly.

★ About AUTO RUN

When AUTO RUN mode is selected, the setting temperature will not be displayed on the LCD, the unit will be in accordance with the room temp. automatically to select the suitable running method and to make ambient comfortable.

★ About turbo function

If start this function, the unit will run at super-high fan speed to cool or heat quickly so that the ambient temp. approachs the preset temp. as soon as possible.

★ About lock

Press +and - buttons simultaneously to lock or unlock the keyboard. If the remote controller is locked, the icon $\widehat{}$ will be displayed on it, in which case, press any button, the mark will flicker for three times. If the keyboard is unlocked, the mark will disappear.

★ About swing up and down

- 1. Press swing up and down button continuously more than 2s,the main unit will swing back and forth from up to down, and then loosen the button, the unit will stop swinging and present position of guide louver will be kept immediately.
- 2. Under swing up and down mode, when the status is switched from off to $\geqslant 1$, if press this button again 2s later, $\geqslant 1$ status will switch to off status directly; if press this button again within 2s,the change of swing status will also depend on the circulation sequence stated above.

★ About switch between Fahrenheit and Centigrade

Under status of unit off, press MODE and - buttons simultaneously to switch °C and °F

★ About new function of defrosting

It indicates: after starting this function by remote controller and the unit has been under defrost status, If turn off the unit by remote controller, the unit will not stop defrosting until it is finished; if change setting mode by remote controller, the function ,which is set last time, won't be carried out until defrosting finished.

Operation of this function on or off: If remote controller is under off status, press mode button and X-FAN button simultaneously in order to enter or cancel this new function. If the unit is under defrost mode, dual eight position on remote controller will display H1. If switch to heat mode, the position will display H1, which flickers for 5s, in which case, press +/- button, H1 will disappear and setting temp. be displayed.

After remote controller is powered on, the new defrost function will be defaulted to be closed.

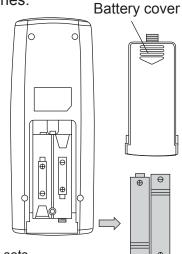
Changing batteries and notices

The wireless remote control adopts two new AAA1.5V dry batteries.

- 1. Slide the cell cover downward to take out the worn cells, then change 2 new ones (note to the correct polarity).
- 2. Cover the cell cover.

★ NOTE:

- When changing the batteries, do not use the old or different batteries, otherwise, it can cause the malfunction of the wireless remote control.
- If the wireless remote control will not be used for a long time, please take them out, and don't let the leakage liquid damage the wireless remote control.
- The operation should be in its receiving range.
- It should be placed at where is 1m away from the TV set or stereo sound sets.
- If the wireless remote control can not operate normally, please take them out, after 30s later and reinsert, if they cannot normally run, please change them.



Sketch map for changing batteries

Operation of Remote Controller

16 SLEEP:

Press this button to go into the SLEEP operation mode. Press it again to cancel this function. This function is available in COOL, HEAT (Only for models with heating function) mode to maintain the most comfortable temperature for you.

17 LIGHT:

Press LIGHT button to turn on the display's light and press this button again to turn off the display's light. If the light is turned on, is displayed. If the light is turned off, is displayed.

18 Combination of "+" and "-" buttons: About lock

Press "+" and "-" buttons simultaneously to lock or unlock the keypad. If the remote controller is locked, \square is d isplayed. In this case, pressing any button, \square blinks three times.

Combination of "MODE" and "-" buttons: About switch between Fahrenheit and Centigrade At unit OFF, press "MODE" and " - " buttons simultaneously to switch between °C and °F.

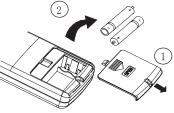
Replacement of Batteries

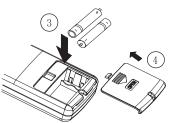
1. Remove the battery cover plate from the rear of the remote controller. (As shown in the figure)

- 2. Take out the old batteries.
- 3. Insert two new AAA1.5V dry batteries, and pay attention to the polarity.
- 4. Reinstall the battery cover plate.

★ Notes:

- When replacing the batteries, do not use old or different types of batteries, otherwise, it may cause malfunction.
- If the remote controller will not be used for a long time, please remove batteries to prevent batteries from leaking.
- The operation should be performed in its receiving range.
- It should be kept 1m away from the TV set or stereo sound sets.
- If the remote controller does not operate normally, please take the batteries out and reinsert them after 30 seconds. If it still can't operate properly, replace the batteries.





Sketch map for replacing batteries

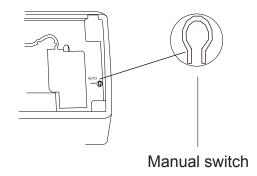


Emergency Operation

Emergency Operation

When the remote controller is lost or damaged, please use the manual switch on the main unit. In that case, the unit will operate in AUTO mode and the temperature setting or fan speed can not be changed.

The manual switch can be operated as below:



- Turn on the unit: Press AUTO/STOP button to enter AUTO mode.
 - The microcomputer will select the mode (COOL, HEAT, FAN) automatically according to the room temperature for reaching comfortable effect.
- Turn off the unit: Press the AUTO/STOP button to switch off the unit.
- The operation mode is seen in the following table.

Mode	Model	Temperature setting	Airflow rate
AUTO	COOLING	25°C (COOL,FAN)	AUTO
AUTO	HEAT PUMP	25°C (COOL,FAN)	AUTO
AUTO	HEAT PUMP	20°C (HEAT)	AUTO

• This switch is to be applied when the remote controller is missing.

Clean and care



Caution

- Turn power off and pull out the power plug before cleaning air conditioner, or it may cause electric shock.
- Never sprinkle water on the indoor unit and the outdoor unit for cleaning because it can cause an electric shock.
- Volatile liquid (e.g. thinner or gasoline) will damage the air conditioner. (So wipe the units with a dry soft cloth, or a cloth slightly moistened with water or cleanser.)

Clean the front panel

When cleaning the front panel, please dip the cloth into the water temperature of 45°C below, then to dry the cloth and wipe the dirty part.

Note: Please do not to immerse the front panel in water, due to there are microcomputer components and circuit diagrams on the front panel.

Clean the air filter (Recommended once every three months)

NOTE: If dust is much more around the air conditioner, the air filters should be cleaned many times. After taking off the filter, don't touch the fin of indoor unit, in order to avoid hurt your fingers.

1 Take down the air filter

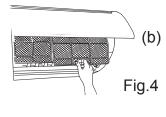
At the slot of surface panel to open an angle, pull the air filter downward and take it out, please see the Fig. 4 (a, b).



2 Clean the air filter

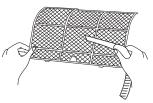
To clean the dust adhering to the filters, you can either use a vacuum cleaner, or wash them with warm water the water with the neutral detergent should below 45 degree), and dry it in the shade.

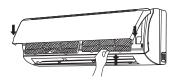
NOTE: Never use water above 45°C to clean, or it can cause deformation or discoloration. Never parch it by fire, or can cause a fire or deformation.



(3) Insert the air filter

Reinsert the filters along the direction of arrowhead, and then to cover the cover and clasp it.





Check before use

- ① Be sure that nothing obstructs the air outlet and intake vents.
- ② Check that whether ground wire is properly connected or not.
- ③ Check that whether the batteries of air conditioner are changed or not.



Maintain after use

- 1 Turn main power off.
- ② Clean the filter and indoor and outdoor units' bodies.
- ③ Clear dust and obstructions from the outdoor unit.





Don't attempt to repair the air conditioner by yourself, it can cause an electric shock or fire. Please check the following items before asking for repair, it can save your time and money.

Phenomenon	Troubleshooting
Not operate immediately when the air conditioner is restarted.	Once the air conditioner is stopped, it will not operate in approximately 3 m inutes to protect itself.
There's unusual smell blowing from the outlet after operation is started.	The unit has no peculiar smell by itself. If has, that is due to the smell accumulated in the ambient.
?	Solution method: Cleaning the filter. If problem still has, so need to clean air conditioner. (Please contact with the authorized maintenance center.)
Sound of water flow can be heard during the operation.	The air conditioner is started, when it is running the compressor started or stopped running, or the unit is stopped, sometimes there is swoosh or gurgle, the sound is due to refrigerant flowing they are not malfunctions.
In COOL mode, sometimes the mist emitted from the air outlet vent.	When the indoor temperature and humidity are very high, this phenomenon would happen. This is caused by the room air is swiftly cooled down. After running for a while, indoor temperature and humidity will fall down, the mist will die away.
Creaking noise can be heard when start or stop the unit.	This is caused by the deformation of plastic due to the changes of temperature.



♦ Troubleshooting

Phenomenon	Troubleshooting
Phenomenon	Troubleshooting
The unit can not run.	Has the power been shut down?
	• Is power plug loosed?
Breaking off	Is the circuit protection device tripped off or not?
	 Is voltage higher or lower? (Tested by professionals)
	• Is the TIMER correctly used?
	· ·
Cooling(Heating) efficiency is not good.	Is Temp. setting suitable?Were inlet and outlet vents obstructed?
	• Is filter dirty?
	Are the windows and doors clothed?
	Did Fan speed set at low speed?
	 Is there any heat sources in the room?
[F 16]	
Wireless remote control is not available.	The unit is interfered by abnormal or frequent functions switchover occasionally the controller
	cannot operate. At this time, you need to pull out of
	the plug, and reinsert it.
	 Is it in its receiving range? Or obstructed? To check the voltage in wireless remote control inside
	is charged, otherwise to replace the batteries.
	Whether the wireless remote control is damaged.
If water leakage in the room.	The air humidity is on the high side.
-	Condensing water over flowed.
	The connection position of indoor unit drainage
	pipe is loosed.
Noise from indoor unit emitted.	The sound of fan or compressor relay is switching on or off.
	When the defrosting is started or stop running, it
	will sound. That is due to the refrigerant flowed to the reverse direction.
	a If unit in supplies under the high housidity for
Moisture on air outlet vent.	 If unit is running under the high humidity for a long time, the moisture will be condensed
	on the air outlet grill and drip off.

♦

Troubleshooting

Phenomenon	Troubleshooting
Indoor unit cannot deliver air.	 In HEAT mode, when the temperature of indoor heat exchanger is very low, that will stop deliver air in order to prevent cool air. (Within 2min) In HEAT mode, when the outdoor temperature is low or high humidity, there are much frost be formed on the outdoor heat exchanger, that the unit will automatically defrost, indoor unit stop blowing air for 3-12min. During the defrosting, there is water flowing out or vapor be produced. In dry mode, sometimes indoor fan will stop, in
	order to avoid condensing water be vaporized again, restrain temperature rising.
E5: overcurrent protection	Power indicator blinks and E5 is displayed
C5:Connector jumper malfunction	 Check if the connector jumper contacts the properly. If replace the PCB, please take off the old for the new PCB.
F1:Indoor ambient temp. sensor malfunction	 Check if indoor room temp.sensor is connected properly?
F2:Evaporator temp.sensor malfunction	 Check if indoor tube temp.sensor is connected properly?
H6:PC motor (indoor fan) can't run	 Feedback terminal of PG motor hasn't been connected firmly. The control end of PG motor hasn't been connected firmly. Fan blade hasn't been installed correctly and it can't run smoothly. Motor hasn't been installed correctly and tightly. Motor has been damaged. Control panel has been damaged.
U8:Malfunction of zero cross detection circuit for PG motor (indoor fan)	Control panel has been damaged.
Defrosting or oil return mode	 It is normal. The indicating lamp in heat mode will wink 0.5s and light 10s.



Immediately stop all operations and plug out, contact the dealer in following situations.

There is harsh sound during operation.
The terrible odors emitted during operation.
Water is leaking in the room.
Air switch or protection switch often breaks.
Carelessy splash water or something into unit.

There is an abnormal heat in power supply cord.

Stop running and cut off the power supply.





Important Notices

- 1. The unit installation work must be done by qualified personnel according to the local rules and this manual.
- 2. Before installation, please contact with local authorized maintenance center, if unit is not installed by the authorized maintenance center, the malfunction may not solved, due to discommodious contacts.
- 3. When removing the unit to the other place, please firstly contact with the authorized Maintenance Center in the local area.
- 4. The appliance must be positioned so that the plug is accessible.
- 5. After pull out the power plug then make the appliance operation again,to avoid the icing of outdoor unit damage axial flow fan, should electrify the appliance but not operation for 4 hours for warm-up purpose.

Basic Requirements For Installation Position

Install in the following place may cause malfunction. If it is unavoidable contact with service center please:

- Place where strong heat sources, vapors, flammable gas or volatile object are emitted.
- Place where high-frequency waves are generated by radio equipment, welders and medical equipment.
- Place where a lot of salinities such as coast exists.
- Place where the oil (machine oil) is contained in the air.
- Place where a sulfured gas such as the hot spring zones is generated.
- Other place with special circumstance.

Indoor Unit Installation Position Selection

- 1. The air inlet and outlet vent should be far from the obstruction, make sure that the air can be blown through the whole room.
- 2. Select a position where the condensing water can be easily drained out, and the place is easily connected for outdoor unit.
- 3. Select a location where the children can not reach.
- 4. Can select the place where is strong enough to withstand the full weight and vibration of the unit. And will not increase the noise.
- 5. Be sure to leave enough space to allow access for routine maintenance. The height of the installed location should be 250cm or more from the floor.
- 6. Select a place about 1m or more away from TVset or any other electric appliances.
- 7. Select a place where the filter can be easily taken out.
- 8. Make sure that the indoor unit installation should accord with installation dimension diagram requirements.
- 9. Do not use the unit in the immediate surroundings of a laundry a bath a shower or a swimming pool.