

### **QUEEN SERIES**

**ASH-24AQ** 



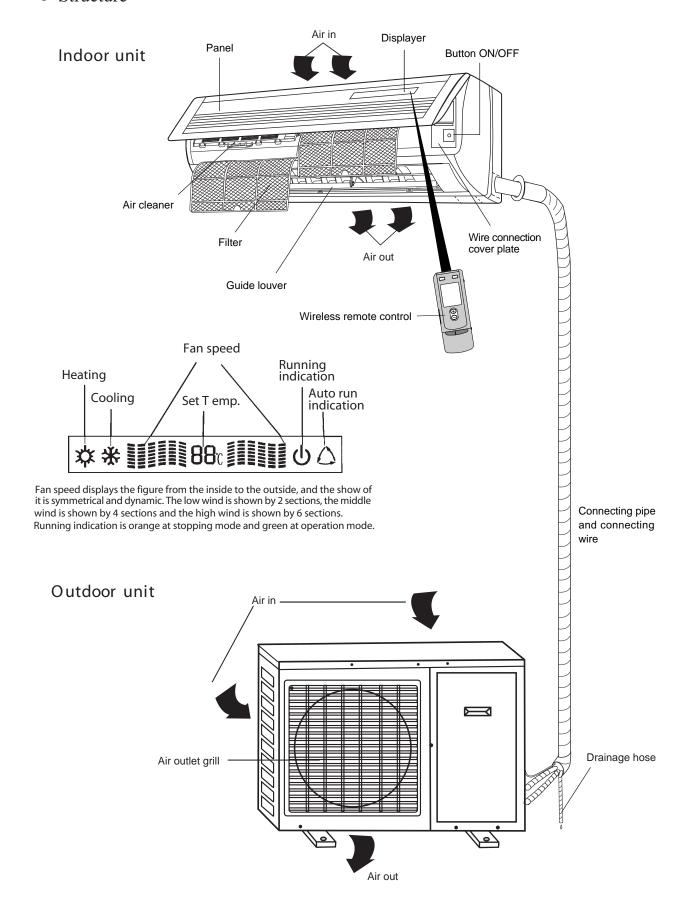
Thank you for choosing SINCLAIRair conditioner, please read this owner's manual carefully before operating the unit and keep it carefully for consultation.



tion	Structure	1
S tructure and operation	Important notes	2
and o	Models & specifications	
cture	Names and functions of buttons	6
S tru	Operation guide	8
	Accessories	9
	Notes for installation	10
ion	Notes for electric wiring	11
Installation	Notes for piping	12
Install the indoor unit		13
	Install the outdoor unit  Test operation and check after installation	
Care and laintenance	Care and maintenance	21
Care	Trouble shooting	23

#### Structure and operation

#### Structure



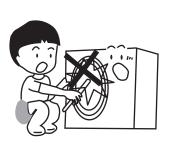
#### • Important notes

Air conditioner should be operated with stable voltage. Otherwise, compressor would vibrate terribly to damage refrigeration system.

Never splice or damage the power cord and control cord. If the power cord and control cord are damaged, you should ask the qualified personnel to change them.



Never insert anything into the air conditioner, also never insert your hands into the outlet of the indoor unit and the outdoor unit.



Before opening the air conditioner, can open the door or window while the air is not so good. When using the air conditioner, window should be closed.



The power must adopt special circuit with air switch protection and it should have enough power capacity.



The air conditioner is ON/OFF automatically to meet your need. Please don't start or close the air conditioner frequently, otherwise it can affect the performance.

The cut-off valve of the outdoor unit must be operated by qualified personnel, otherwise it can damage the

compressor. During the installation, the outdoor unit should discharge the gas.



Delay the operation of the air conditoner

In order to avoid the overload, air conditioner should be delayed about 3~4 minutes to get in COOL, HEAT or DRY cycle under the following conditions:

- Starting the air conditioner immediately after closing.
- During the function buttons of the air conditioner are adjusted.

smell

The air conditioner is normal while the indoor unit sometimes sends out some odor, because the air was mixed with the smell of furniture and smoke. The power must adopt special circuit.

Don't use longer power cord and don't share a same socket with the other electric appliances in order to avoid the fire. If the air conditioner hasn't been used for a long time, the power should be closed.

#### • Models & specifications

Model	ASH-24AQ	
Function	Cooling/heating	
Auxiliary function	With air cleaner and memory function	
Cooling capacity (W)	7000	
Heating capacity (W)	7600	
Rated Voltage	220-230V~	
Rated frequency	50Hz	
Cooling/heating rated input (W)	2900/3000	
Air flow volume (m <sup>3</sup> /h)	850	
Refrigerant and charge	R410a 1.9kg	
Waterproof level	IPX4	
Noise(In/Out)dB(A)	48/59	
Climate type	T1	
Isolation		
Weight (In/Out)(kg)	12/59	
$\begin{array}{c} {\sf Dimension(In/Out)} \\ {\sf (Width \times height \times depth)(cm)} \end{array}$	Indoor: $90.7 \times 29.0 \times 21.3$ Outdoor: $95.0 \times 70.0 \times 41.2$	

All above should be changed without notice, there are latest and accurate specifications on the nameplate of your air conditioner.

#### \* Working temperature range

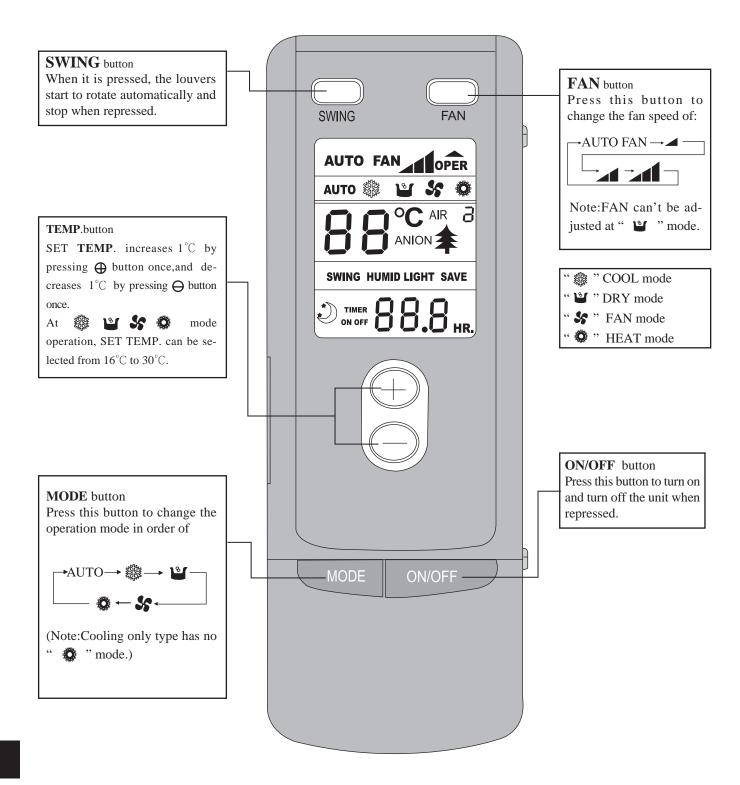
	Indoor side DB/WB( $^{\circ}\mathbb{C}$ )	Outdoor side	e DB/WB( °C)
Max.Cooling	32/23	43/26(T1)	52/31(T3)
Min.Cooling	21/15	21/-	
Max.Heating	27/12	24/18	
Min.Heating	g 20/5/-6		/-6

<sup>\* &</sup>quot;Memory function" means that after the power supply turns off suddenly and then turns on, the air conditioner automatically runs in the old state. (Remark:The memory function will be clear when the unit is stopped by the remote control.)

Names and Functions of buttons

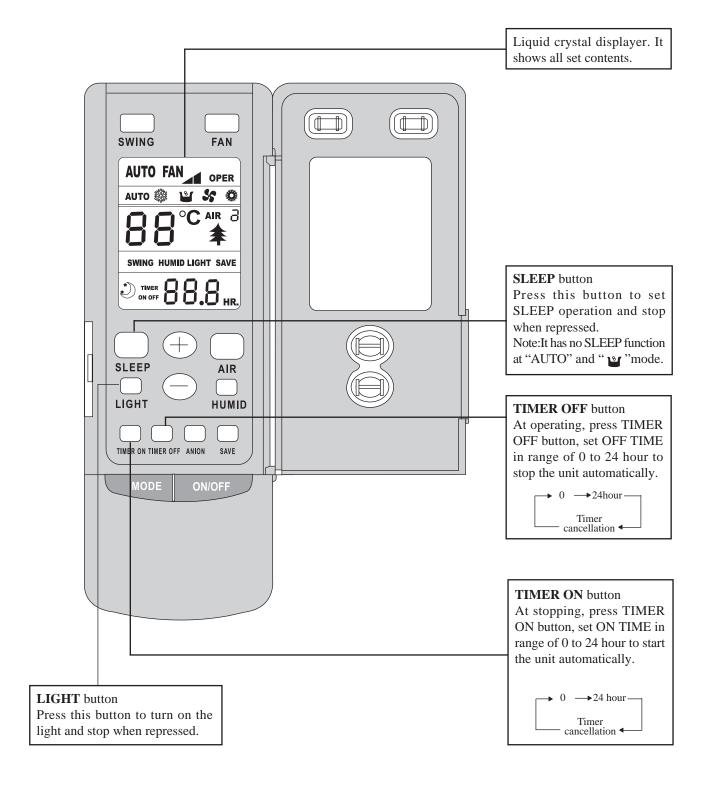
#### Note:

- Be sure that there are no obstructions between receiver and remote control.
- 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 it is very hot.



#### Names and Functions of buttons

## **Note:** Functions of buttons not applicable to models described in this manual are not explained below.



#### Operation guide

#### The general procedure:

- 1. Plug to power supply and press **ON/OFF** button to start the unit.
- 2. Press **MODE** button to select the suitable operation mode.
- 3. Press **SWING** button to swinging and stop when pressing it again.
- 4. Press **FAN SPEED** button to set desired fan speed.
- 5. Press **TEMP.** button +/- to set desired temperature.

#### The selected Procedure:

- 6. Press **SLEEP** button to set the sleep.
- 7. Press **TIMER ON/OFF** button to set the scheduled time.

Note: In **AUTO** mode, the unit will automatically adjust its running modes according to the room temperature changes.

(This product has no function of air exchange.)

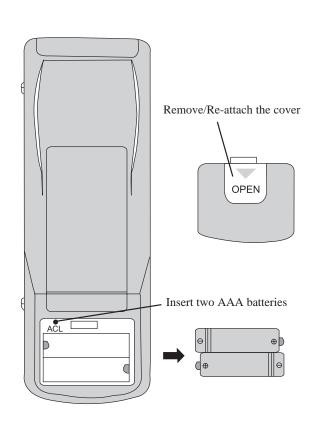
#### How to insert batteries

The remote control adopts two AAA dry-cell batteries.

- 1. Remove the cover from the back of the remote control and insert two AAA dry-cell batteries (Pay more attention to the polarity).
- 2. Re-attach the cover.

#### Note:

- Don't mix new and used or different types of batteries.
- Remove batteries away when the remote control is not in use for a long time.
- The batteries can be used for about one year.
- The remote control signal can be received in the range of receiving.
- The remote control should be placed about 1m or more away from the TV set or any other electric appliances.



#### Installation

#### Accessories (Check that all accessory parts are present before installation)

No.	Part name	Diagram	Qty	Specification	Memo
1	Rear panel		1		
2	Wireless remote control		1		
3	Battery	(F( ) (b)	2	AAA 1.5V	
4	Power connection cord		1		
5	Control cord		1		Heat pump type only
6	Tapping screw	Эшэ	5	ST4.2 × 25	Fix the rear panel
7	Plastics drain hose	Branch Branch	1		Packaged with connection piping
8	Gum type sealer	annual de la company de la com	1		
9	Piping- hole sleeve		2		Packaged with connection piping
10	Wrapping tape	0	2	30 × 10	Packaged with connection piping
11	Air cleaner	AT THE	2		Packaged with indoor unit
12	Thermal insulation hose	(12,12,12,12,12,12,12,12) (12,12,12,12,12,12,12,12)	1		
13	outdoor drain elbow		1		Heat pump type only
14	outdoor drain stem		3		Heat pump type

<sup>\*</sup> Be sure to use the exclusive accessories list above in the installation, or it will lead to water leakage, electric shock, fire, etc.

#### Notes for installation

#### **Installation location**

- A location from which the condensation water can be drained out conveniently.
- Install in a location where is far away from other electric appliances such as television, audio device, etc.
- Install in a location where there is beside the coach and other places with special circumstance, please contact the sale representative in advance.
- Avoid a location where there is inflammable gas leak.
- Avoid a location where there is combustible and explosive gas, corrosive gas or large electromagnetic disturbance.
- Avoid a location where there are heat source and sunlight.
- Avoid a location where there are combustibles such as curtain, clothes, etc.

#### Noise

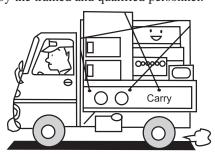
- Install in a location where is strong enough to withstand expanding of the noise and vibration of the unit.
- Be sure that there are no obstructions around the outlet of the outdoor unit.
- Select a location from which noise and outflow air emitted by unit will not inconvenience neighbors.
- If there are special sounds during the operating, please contact sale representative.





#### Removing the air conditioner

• When picking up and moving the units, you must be guided by the trained and qualified personnel.



#### **Electric wiring**

- The ground must be connected.
- The power supply must use the rated voltage and special circuit.
- Don't pull the power lines strongly.
- The diameter of the power wiring should be large enough.
- Wiring work should conform to relative standard.
- Earth wire must be connected to special device and done by the qualified personnel.
- Be sure that there are leakage protection switch and air switch with enough capacity in the fixed circuit.

#### Earth requirment

- 1. The air conditioner is class 1 appliance, so it must connect with ground reliably.
- 2. The yellow-green wires in the air conditioner are earth wires and can't be used for other purposes.

  They can't be cut off and fixed by the tapping screw,
- They can't be cut off and fixed by the tapping screw, otherwise it can cause an electric shock.

  3. The earth-resistance should conform to the require-
- ment of National Standard GB17790.

  4. The user's power supply must have the earth end.

The earth wire can't be connected to the following places:

- 1 Water pipe
- ② Gas pipe
- ③ Drainage pipe
- 4 The other places those the qualified personnel opposes.

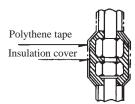
#### • Notes for electric wiring

- 1. All the electric work must be done according to the local wiring regulation and this manual.
- 2. The rated voltage and exclusive circuit must be used.
- 3. Be sure that there are leakage protection switch and air switch (20A) with enough capacity.
- 4. The radius of the power cord should be bigger enough. The damaged power cords and connection cords must be replaced by the special cords.
- 5. The earth end of the socket must connect the ground reliably, the earth wire can't be connected to the gas pipe, water pipe, wires of the lightning rod and telephone.
- 6. The screw that fixes the wires must be fixed tightly and replaced If it was loosened, the tapping screw can't be used for the electric wiring.
- 7. Please connect the wires according to the circuit diagram that is attached on the unit.
- 8. All the wires those GREE provides only can be used and can't be replaced by the others. The length and end of wires can't be changed. If adjusted, please contact the service center of SINCLAIR.
- 9. For the power supply without the plug, it can't be used with the plug.
- 10. Electric wiring of the indoors and outdoors can't be affected by the pull and distortion.
- 11. " (earth wire) means the yellow-green wire of the cable only can be connected to the earth wire. (Please see "Earth requirement" on Page 10.)
- 12. After wiring, power cord, power cable and signal wiring should be fixed by wire clamp and wires between the connections should be a little free.
- 13. Check if each wire is installed firmly with the force of about 0.5kg.When checking the connection of the interface, please enclasp it and check each wire that connects it.
- 14. All the power supply cord directly connected to the fixed wiring without plug, and must incorporated a supply disconnection with have at least 3mm open contact seperation in each pole.

#### Notes for piping

Connection pipe and drainage pipe should be insulated to avoid frosting and dripping.

Note: Insulate all exposed parts of the flare-end connection joint and connection pipe.



#### 1. Connecting the pipe

Check valve of the outdoor unit should be shut (like position unworking). Every time when connecting, remove bonnet from the check valve and connect to flare-end pipe immediately (within five minutes), otherwise dust, moisture and other small things may go into the pipe and cause troubles.

#### ☐ About the bendable pipe

- The part with bendable pipe should be used on the indoor side.
- The bending angle should not be more than 90°.
- It's better for the bend to be in the middle of the pipe, and the radius of the bend is the bigger the better.
- Don't bend the bendable pipe more than three times.

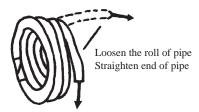
#### ☐ When bending the pipe

- Cut some part of the insulation pipe at the place of the bend (and wrap with polythene tape after bending).
- Make radius of the bend as big as possible so that the pipe will not get flat or broken.
- Tighten the pipe bending by the rube bender.

Bend the pipe with thumb



Min. radius: 100mm



#### 2. When using copper pipe bought locally

Check valve of the outdoor unit should be shut (like position unworking). After the connection pipe has been connected to both indoor and outdoor units, exhaust from service mouth on low-pressure check valve of the outdoor unit. After exhausting, put back nut of the service mouth and fasten.

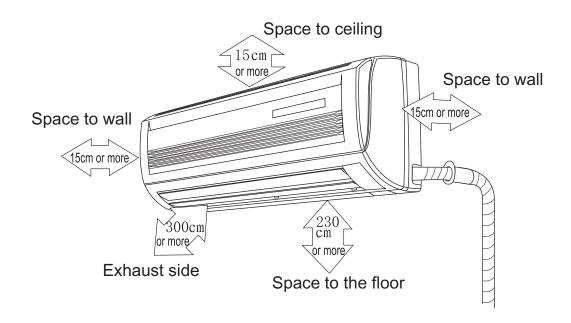
3. After finishing step 1 and 2, check valve of outdoor unit should be fully open so that there is not blockage between the indoor and outdoor connection pipe.

Note: Before fastening nut of the flare-end pipe, please apply some refrigerant oil to the end of the pipe and the joint.

#### Install the indoor unit

#### 1. Choosing the installation location

- 1. The inlet and outlet should not be covered so that the outflow air can reach all parts of the room.
- 2.Install in a location from which the condensation water can be drained out conveniently and that is permitting easy connection with the outdoor unit.
- 3. Avoid a location where there is heat source, high humidity or inflammable gas.
- 4.Install in a location where is strong enough to withstand the full weight and vibration of the unit.
- 5.Be sure that the installation conforms to the installation dimension diagram.
- 6.Be sure to leave enough space to allow access for routine maintenance. The height difference between the installation location of the indoor unit and the floor is more than 230cm.
- 7.Install in a location where is lm or more away from other electric appliances such as television, audio device, etc.
- 8. Select a location where is easy to remove and clean the filter.
- 9.Do not use the unit in the immediate surroundings of a laundry, a bath a shower or a swimming pool.



#### 2. Install the rear panel

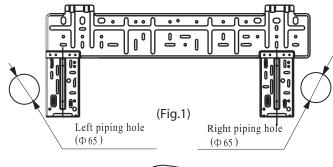
- 1. Always mount the rear panel horizontally.
- 2.Fix the rear panel on the selected location with screws supplied with the unit.
- 3.Be sure that the rear panel has been fixed firmly enough to withstand the weight of an adult of 60kg, furthermore, the weight should be evenly shared by each screw.
- 4.Because the drainage pipe is at the right side of the panel, the right side of the panel should be adjusted at a slight downward slant.

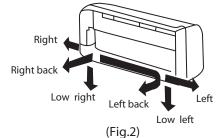
#### 3. Install the piping hole

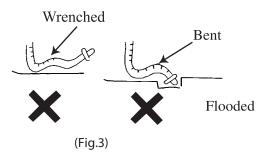
- 1. The direction or piping can be chosen one of 6 directions as shown in Fig. 2.
- 2.Make the piping hole (\$\phi\$ 65) in the wall at a slight downward slant to the outdoor side. The center of the hole should be determined refer to Fig.1.
- 3.Insert the piping hole sleeve into the hole to prevent the connection piping and wiring from being damaged when passing through the hole.

#### 4. Install the drain hose

- 1.For well draining, the drain hose should be placed at a downward slant.
- 2.Do not wrench or bend the drain hose or flood its end by water.
- 3. The extended drain hose should be insulated when passing through the indoor unit.







#### 5. Install the connection pipes

Connect the connection pipes with the relevant union pipes of the indoor unit and fix the joint nuts of the connection pipes. (Shown in P17 "Install the connection pipe")

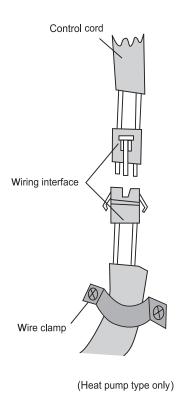
#### NOTE:

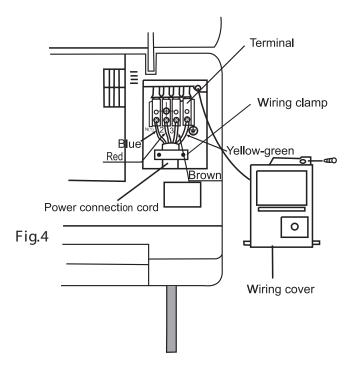
- Connect the connection pipes with the indoor unit firstly and the outdoor unit secondly.
- •Be car eful in bending the connection pipes, or you will damage the pipes.
- •If the tightening tor gue is too great in tightening the flarenuts, leakage will happen.

#### 6. Electrical wiring

- 1. Open the surface panel.
- 2.Remove the wiring cover and clamp(Fig.4).
- 3. Route the power connection cord from the back of the indoor unit and pull it toward the front through the wiring hole for connection.
- 4.Connect the blue wire of the power connection cord to the terminal "N(1)", the red one to "2", the brown one to "3", and the yellow- green one ( earth wire ) to "

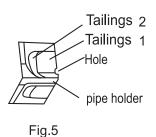
  "" as shown in Fig.4.
- 5. For the heat pump type, connect the control cord to the indoor unit through wiring interface shown in Fig.4, and clamp the connection cord on the chassis.
- 6. Reassemble the clamp and wiring cover, then fix them all by the screws.
- 7.Recover the surface panel.





#### 7.Install the indoor unit

- 1.When routing the piping and wiring from the left or right side of the indoor unit, cut off the tailings from the pipe holder in necessary (shown in Fig.5).
- ①Through the hole when routing the wiring only.
- ②Cut off the tailings I when routing both the wiring and piping.
- 2. Wrap the piping and wiring and pull them through the cut off tailings hole (shown in Fig.6).
- 3. Hang the 2 mounting slots of the indoor unit on the upper tabs of the real panel and check if it is firm enough.
- 4.The height of the installation location of indoor unit should be 2.3m or more higher than the floor.
- 5.Two air cleaners provided with the unit should be installed on the unit. (Please see the details in P22.)



Control cord (Heat pump type only)

Power connection cord

Drain hose

Connection pipe

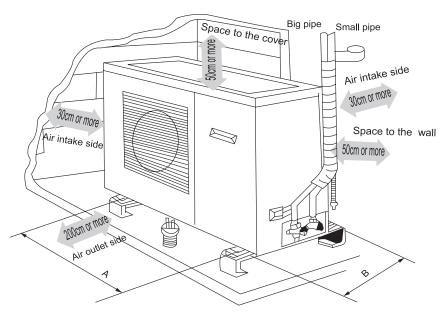
Fig. 6 Wrapping tape

#### • Install the outdoor unit

#### 1. Choosing the installation location

#### Note:

- The outdoor unit must be installed on the solid foundation to minimize noise and vibration.
- The air outlet must not be blocked.
- In coastal area, places of strong wind on the high altitude, please install the unit against the wall or use wind block.
- Specially install in a location where is strong wind, air is not permitted to get into the air conditioner.
- Install the unit with good ventilation instead of a sealed space.
- Installation dimension:



Model Dimension A Dimension B  ASH-24AQ 572 378			01111111111
ASH-24AQ 572 378	Model	Dimension A	Dimension B
ASH-24AQ 572 378			
	ASH-24AQ	572	378

Unit:mm

#### 2. Install the connection pipe

- 1. Align the center of the piping flare with the relevant valve.
- 2.Screw in the flare nut by hand and then tighten the nut with spanner and torque wrench refer to the diagram at right figure.

Note: Exceeding tightening torque will damage the flare surface.

#### Tightening torque table

Hex nut diameter (mm)	Tightening torque(N.m)
Ø 6	15~20
Ø9.5	31~35
Ø12	50~55
Ø16	60~65

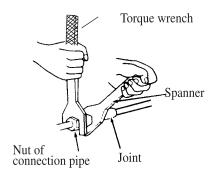
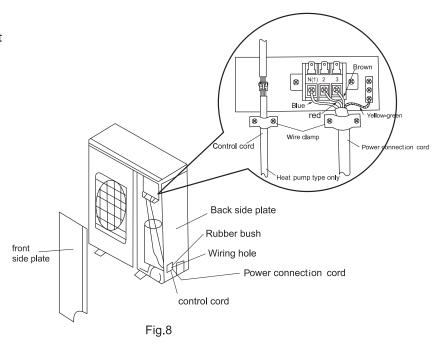


Fig.7

#### 3. Electric wiring connection

- 1.Remove the front side plate of the out -door unit and Pull all wires throught the rubber bush.
- 2.Remove the wire clamp and connect the end of the power connection cord with screws to the wiring terminal board as shown in right figure.
- 3.Tighten the power connection cord and control cord with wire clamp, then connect the relevant interface.
- 4.Make sure that the wiring has been connected firmly.
- 5.Reassemble the front side plate.

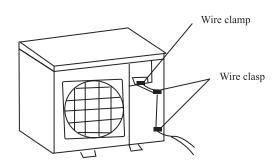


#### NOTE:

Wrong wiring connection will cause electrical malfunction.

Do not pull the wire when fixing it with wire

Do not let the wire too loose in the outdoor unit.



#### 4. Air purging and leakage test

Exhausting (with hexagon wrench)

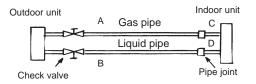
Length of pipe	Exhausting	Value of refrigerant charge
5m	Use refrigerant of the outdoor unit	As the value on the nameplate
5-15m	Use vacuum pump	Nameplate value +30g/m (charge 30g more for every meter added to the pipe.)

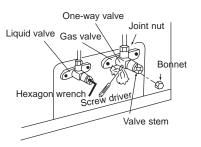
- \* 1. See section about vacuum pump or refrigerant tank at right side.
- \* 2. charge refrigerant according to value listed above. If the unit is to be moved to other place, please evacuate with vacuum pump or refrigerant tank.

#### When operating the check valve, please note:

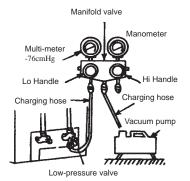
- Open valve stem until it touches limit block and don't open further.
- Tighten bonnet by the spanner or any other tools.
- Tighten the torque of the bonnet.

- When using refrigerant of outdoor unit:
- 1. Tighten nuts A, B, C, D substantially.
- 2.Remove cover from check valve A.
- 3.Twist open core of liquid valve B with hexagon wrench, and at the same time hold screw driver against core of gas valve A to let gas out. After 15 seconds of exhausting and refrigerant appears, close one-way valve and tighten bonnet.
- 4.Fully open cores of both liquid valve and gas valve, tighten bonnet, then check with soap water or leakage detector to see if there is any leaking in the joints of piping between indoor and outdoor units.



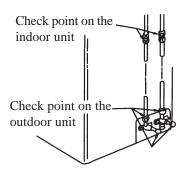


- ※ When using the vacuum pump
- 1. Connect charging hose of manifold valve to charging end of low pressure valve (both high/low pressure valves must be tightly shut).
- 2. Connect joint of charging hose to vacuum pump.
- 3. Fully open handle of Lo manifold valve.
- 4.Open the vacuum pump to evacuate. At the beginning, slightly loosen joint nut of low pressure valve to check if there is air coming inside. (Valve of vacuum pump changes from negative to 0) Then tighten this nut.
- 5. After finishing evacuation, shut Lo handle of manifold valve to stop the vacuum pump.
- Keep evacuating for more than 15 minutes and make sure the reading of multimeter is  $-1.0 \times 10^{5}$  pa(-76cmHg).
- 6. Fully open high/low pressure valves.
- 7.Remove charging hose from charging end of low pressure valve.
- 8. Tighten bonnet of low-pressure valve.



#### Leakage checking

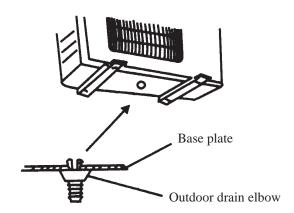
Check with soap water or leakage detector to see if there is any leaking in the joints.



#### 5.Outdoor condensation drainage (Heat pump type only)

When the unit is heating or defrosting, the waste water formed in the outdoor unit can be drained out reliably through the drain hose.

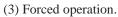
**Installation:** Install the outdoor drain elbow in the  $\Phi$ 25 hole on the base plate as below, and joint the drain hose to the elbow, so that the waste water formed in the outdoor unit can be drained out to a proper place.



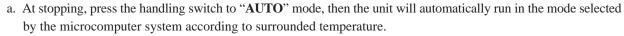
#### Test operation and check after installation

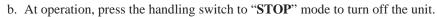
#### 1.Test operation

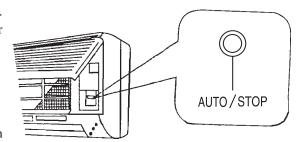
- 1. Before test operation
- (1) Do not switch on power before installation is finished completely.
- (2) Electric wiring must be connected correctly and securely.
- (3) Cut-off valves of the connection pipes should be opened.
- (4) All the impurities such as scraps and thrums must be clear from the unit.
- 2. Test operation method
- (1) Switch on power and press "ON/OFF" button on the remote controller.
- (2) Press "MODE" button and check the operation condition of some modes.



Act as following when the remote controller can not be used:







#### 2. Check after installation

Items to be checked	Possible malfunction	Situation
Has it been fixed firmly?	The unit may drop, shake or emit noise.	
Have you done the refrigerant leakage test?	It may cause insufficient refrigerating capacity.	
Is heat insulation sufficient?	It may cause condensation and dripping.	
Does the unit drain well?	It may cause condensation and dripping.	
Is the voltage in accordance with the rated	It may cause electric malfunction or damage	
voltage marked on the nameplate?	the part.	
Is the electrical wiring and piping connection	It may cause electric malfunction or damage	
installed correctly and securely?	the part.	
Has the unit been connected to a secure earth connection?	It may cause electrical leakage.	
Is the newer and enecified?	It may cause electric malfunction or damage	
Is the power cord specified?	the part.	
Has the inlet and outlet been covered?	It may cause insufficient refrigerating capacity.	
Has the length of connection pipes and the	The refrigerant capacity is not accurate	
refrigerant capacity been recorded?	The refrigerant capacity is not accurate	

#### Care and Maintenance

#### Care and Maintenance

#### **CAUTION**

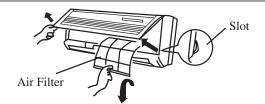
- **■** Turn power off and pull out the power plug before cleaning air conditioner.
- Don't sprinkle water on the indoor unit and the outdoor unit for cleaning because it can cause an electric shock.
- Volatile liquid (e.g. thinner or gasoline) will damage the air conditioner. (So wipe the units with a dry soft cloth, or a cloth slightly moistened with water or cleanser.)

# Take down surface panel and clean it (Take it down before cleaning) 1. Pull along the direction of arrows to take down surface panel. 2. Washing Wipe with a cloth slightly moistened with water or cleaner, and then dry it in the shade. NOTE:Never use water above 45°C to wash the panel, or it could cause deformation or discoloration. 3. Install surface panel Install the supports (those are on two ends of surface panel) into the supporting slots and put the axis into the slots, then cover the surface panel and clasp it.

#### Cleaning the air filters (Recommended once every three months)

If dust is too much around the air conditioner, the air filters should be cleaned many times.

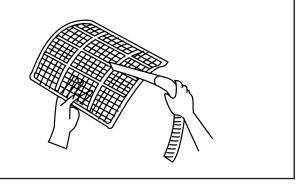
- 1.Take down the air filter
- Open the surface panel, hold the tab of air filter and raise it slightly, and then take it out along the direction of arrow.



- 2. Cleaning
  - To clean the dust adhering to the filters, you can either use a vacuum cleaner, or wash them with water and dry it in the shade.



• Never use water above 45°C to wash the filters, or it could cause deformation or discoloration. Never parch it by fire, or it could cause a fire or deformation.



#### 3. Reinsert the filters

Reinsert the filters with side marked "FRONT" facing forward, then cover the surface panel and clasp it.



#### Installation and replacement of air cleaner

damaged or not. If necessary, please contact the service

center of SINCLAIR.

- ① The low temp.accelerant filter can automatically regenerate during the long time and recycle. If it's dirty, it can be cleaned by water and dried in the shade, then reinsert it. It can be replaced once every 3 years.
- ② Please purchase the alternate filters from the service center of SINCLAIR and replace the old ones.

1.Remove the air filters	(Refer to the first step of "cleaning the air filters")
2.Replace the air cleaner  Take off the packed bag of air purifying filters, and then put new filters into the filter frame.  (Chimb face of filter is upward at left end and chimb face of the other one is downward at right end.)	Put in  Put in  Put in  Put in  Put in  NOTE: Be careful not to injure yourself on the fins.
3.Reinsert the filters	(Refer to the third step of "cleaning the air filters")

## 1.Be sure that nothing obstructs the air outlet and intake vents. 2.Check that whether ground wire is properly connected or not. 3.Replace filters if necessary. 4. Check that whether the support of the outdoor unit is

# 1.Clean filters and other parts. 2.Turn main power off. 3.Clear dust from the outdoor unit. 4.If there is any rust in the outdoor unit, this should be painted over to prevent it from spreading.

#### Trouble shooting

Warning: 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		Trouble Shooting
Please waiting	Indoor unit does not operate immediately when the air conditioner is restarted.	Once the air conditioner is stopped, it will not operate in approximately 3 minutes to protect itself.
	There's unusual smell blowing from the outlet after operation is started.	This is caused by the odors in the room which have been breathed into the air conditioner.
	Sound of water flow can be heard during operation.	This is caused by the refrigerant flowing inside the unit.
	Mist is emitted during cooling operation.	Because the air of the room is cooled down rapidly by the cold wind and it looks like the fog.
	Creaking noise can be heard when start- ing or stopping the unit.	This is caused by the deformation of plastic due to the change of temperature.
ZZZZ GODE	Air conditioner does not operate at all.	<ul> <li>Has the power been shut down?</li> <li>Is the wiring loose?</li> <li>Is the leakage protection switch in operation?</li> <li>Is voltage too high or too low?</li> <li>Is TIMER ON in operation?</li> </ul>
	Cooling (Heating) efficiency is not good.	<ul> <li>Is SET TEMP. suitable?</li> <li>Is air inlet or outlet obstructed?</li> <li>Are air filters dirty?</li> <li>Are the windows and doors closed?</li> <li>Is indoor fan speed set at low speed?</li> <li>Is there any other heat source in your room?</li> </ul>
	Wireless remote control is not available.	<ul> <li>Sometimes the remote control can't be operated when replacing the batteries. At the same time, remove the back cover and press "ACL" to return to normal.</li> <li>Occasionally, the remote control can't be used when the air conditioner is distrubed or changing its functions frequently. At that time, pull out the power plug and insert it again to return to normal operation.</li> <li>Is the remote control out of effective distance to the indoor unit? Are there any obstructions between the wireless remote control and the signal receptor?</li> <li>Replace the worn batteries of wireless remote control if the voltage of the batteries is not sufficient.</li> </ul>

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



- Unusual noise can be heard during operation.
- Power fuse or switch often breaks.
- Carelessly splash water or something into air conditioner.
- Electrical lines and power plug are very hot.
- Wind blowing from the outlet smells terrible during operation

#### NOTE:

Equipment subject to notification to or consent by the supply authority before connection to the system (consent by the supply authority may be requested for high power appliances which are intended to be used only in systems having impedances considerably lower than the reference impedance. General consent may declared for use of a type of appliance in a defined part of the supply system):

- 1. Equipment intended exclusively for professional purposes;
- 2. Appliances and equipment without automatic control means;
- 3. Appliances producing less than one voltage change per hour;
- 4. Appliances producing more than 1800 voltage changes per minute;
- 5. Disturbances caused by manual switching.

#### **ENVIRONMENTAL INFORMATION**

This unit contains fluorinated gases with greenhouse effect covered by the Kyoto Protocol. Maintenance and disposal must be carried out by qualified persons only. Refrigerant gas R410A, GWP = 1730

#### EXTRA REFRIGERANT CHARGE

Pursuant to Regulation EC 842/2006 on certain fluorinated greenhouse gases, in case of extra refrigerant charge, it is compulsory to:

- Fill in the label accompanying the unit inserting the factory quantity of refrigerant charge (see the technical label), the extra refrigerant charge and the total charge.
- Apply the label next to the technical label applied on the unit. For the split-type air conditioner apply on the outdoor unit.

