

## OPERATING INSTRUCTIONS

**NOTE:** This manual does not include Remote Controller Operations, see the <<Remote Controller Instruction>> packed with the unit for details.

### Operating temperature

Mode	Cooling operation	Heating operation	Drying operation
Room temperature	17°C~32°C(62°F~90°F)	0°C~30°C(32°F~86°F)	17°C~32°C(62°F~90°F)
Outdoor temperature	0°C~50°C (32°F~122°F)	-15°C~24°C (5°F~76°F)	0°C~50°C (32°F~122°F)
	(-15°C~ 50°C/ 5°F~ 122°F: For the models with low temperature cooling system)		

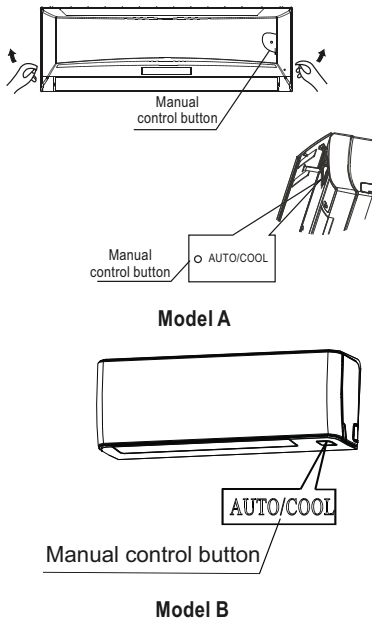
**NOTE:**

- Optimum performance will be achieved within these operating temperatures. If air conditioner is used outside of the above conditions, certain safety protection features might come into operation and cause the unit to function abnormally.
- If the air conditioner operates in a room whose relative humidity is less than 80% the surface of the air conditioner may attract condensation. Please sets the vertical air flow louver to its maximum angle (vertically to the floor), and set HIGH fan mode.

**Suggestion:** For the unit adopts an Electric Heater, when the outside ambient temperature is below 0°C(32°F), we strongly recommend you to keep the machine plugged in order to guarantee it running smoothly.

### Manual operation

Manul operation can be used temporarily in case you can not find the remote controller or test running purpose or maintenance necessary.



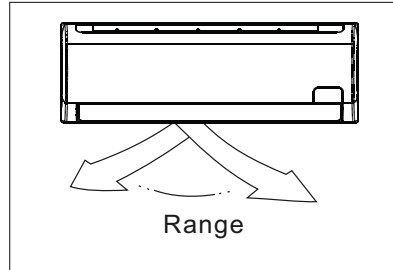
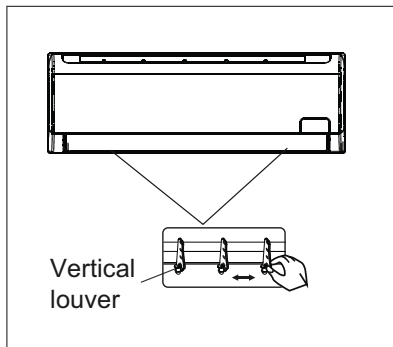
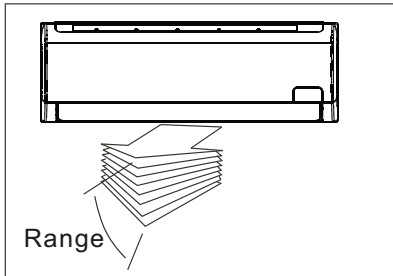
**NOTE:** The unit must be turned off before operating the manual control button. If the unit is operational, continue pressing the manual control button until the unit is off.

- Open and lift the front panel up will see the manual control button(see Model A)  
For some models, the manual control button is located at the bottom of the unit(see Model B).
- One press of the manual control button will lead to the forced AUTO operation. If press the button twice within five seconds, the unit will operate under forced COOL operation.
- Close the panel firmly to its original position.

**NOTE:** For DUCT and CEILING type, CASSETTE type, CEILING and FLOOR type and FLOOR and STANDING type, please refer to the previous pages to operate the Manual button.

## OPERATING INSTRUCTIONS

### Airflow direction control



- Adjust the air flow direction properly otherwise it might cause discomfort or cause uneven room temperatures.
- Adjust the horizontal/vertical louver using the remote controller. For some models, the vertical louver can only be adjusted manually.

#### To set the horizontal/vertical air flow direction

- Perform this function while the unit is in operation.
  - Use the remote controller to adjust the air flow direction. The vertical/horizontal louver changes 6 degree in angle for each press, or swing up and down automatically. Please refer to the 'REMOTE CONTROLLER OPERATION MANUAL' for details.
  - For some models, the vertical louver can only be adjusted manually. Move the deflector rod manually to adjust the air flow in the direction you prefer.
- IMPORTANT:** Do not put your fingers into the panel of blower and suction side. The high-speed fan inside may cause danger.

#### CAUTION

- Do not operate the air conditioner for long periods with the air flow direction set downward in cooling or dehumidifying mode. Otherwise, condensation may occur on the surface of the horizontal louver causing moisture to drop on to the floor or on furnishings.
- Do not move the horizontal louver manually unless it is necessary. Always use the remote controller.
- When the air conditioner is started immediately after it was stopped, the horizontal louver might not move for approximately 10 seconds.
- Open angle of the horizontal louver should not be set too small, as COOLING or HEATING performance may be impaired due to too restricted air flow area.
- Do not operate unit with horizontal louver in closed position.
- When the air conditioner is connected to power (initial power), the horizontal louver may generate a sound for 10 seconds, this is a normal operation.

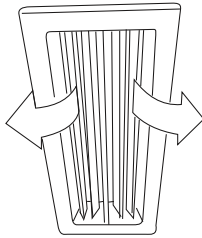
# OPERATING INSTRUCTIONS

## Duct-Ceiling Type

The following is how to adjust the air flow direction when the air outlet parts (sold separately) is used with the indoor unit.

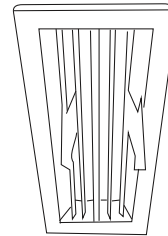
### Cooling

To effectively cool the whole room, please adjust the louver horizontally.



### Heating

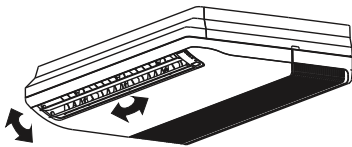
To effectively heat the bottom of the room please set the louver downwards.



## Ceiling-Floor Type

### Auto-swing

Press SWING button, the louver will swing up and down(left and right) automatically.

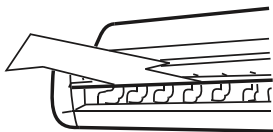


### Manual Swing

Adjust the louver to achieve better cooling/heating effects when cooling/heating.

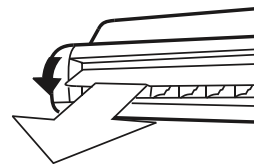
### When cooling

Adjust the louver horizontally.



### When heating

Adjust the louver downwards (vertically).

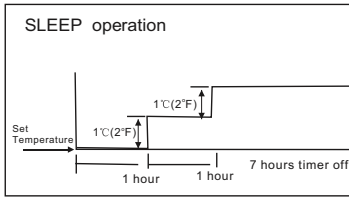


**NOTE :** The heating operation with horizontal air out let will increase the difference of the room temperature.

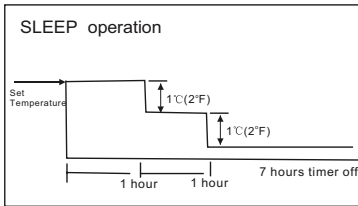
 <b>Notice</b>	 <b>Notice the louver direction</b>	<b>Choose horizontal outlet mode when cooling operation</b> Under cooling operation ,the air flow down will cause condensing dew on the air outlet and louver surface.
-------------------	--	---

## OPERATING INSTRUCTIONS

### How the air conditioner works



#### Cooling



#### Heating

#### AUTO operation

- When you set the air conditioner in AUTO mode, it will automatically select cooling, heating (cooling/heating models only), or fan only operation depending on what temperature you have selected and the room temperature.
- The air conditioner will control room temperature automatically round the temperature point set by you.
- If the AUTO mode is uncomfortable, you can select desired conditions manually.

#### SLEEP operation

- When you push SLEEP button on remote controller during cooling, heating (cooling only type without), or AUTO operation, the air conditioner will automatically increase (cooling) or decrease (heating) 1°C (2°F) per hour.
- The set temperature will be steady 2 hours later. And the air conditioner will be timer off in 7 hours.
- The fan speed will be automatically controlled.
- This feature can maintain the most comfortable temperature and save more energy for you.

#### DRYING operation

- The fan speed will be automatically controlled under dry operation.
- During the dry operation, if the room temperature is lower than 10°C (50°F), the compressor stops operation and restarts until the room temperature is above 12°C (54°F).

## OPERATING INSTRUCTIONS

### Operation mode selection

While simultaneously operating two indoor units or more, make sure the operation modes will not conflict with each other. The heat mode claims precedence over all other modes. If the unit initially started operates under heat mode, the other units can operate under heat mode only. For example: If the unit initially started operates under cool(or fan) mode, the other units can operate under any mode except heat. If one of the unit selects heat mode, the other operating units will stop operation and display "P5" (For the units with display window only) or the Auto and Operation indication light flash rapidly, the Defrost indication light turn off, the Timer indication light remain on (For the units without display window), or the Defrost and Alarm indication light (if applicable) illuminate, the Operation indication light flashes rapidly and the Timer indication light turns off ( For the Floor and standing type).

### Optimal operation

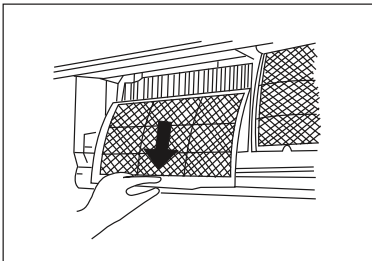
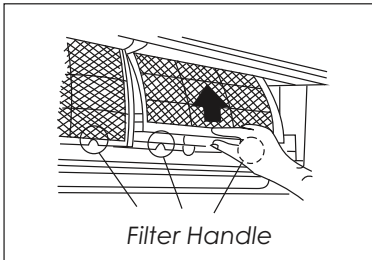
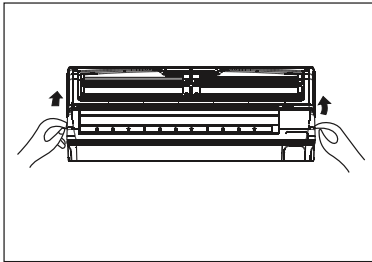
To achieve optimal performance, please note the following:

- Adjust the air flow direction correctly so that it is not directed on people.
- Adjust the temperature to achieve the highest comfort level. Do not adjust the unit to excessive temperature levels.
- Close doors and windows on COOL or HEAT modes, or performance may be reduced.
- Use TIMER ON button on the remote controller to select a time you want to start your air conditioner.
- Do not put any object near air inlet or air outlet, as the efficiency of the air conditioner may be reduced and the air conditioner may stop running.
- Clean the air filter periodically, otherwise cooling or heating performance may be reduced.
- Do not operate unit with horizontal louvre in closed position.

**Suggestion: For the unit adopts an Electric Heater, when the outside ambient temperature is below 0°C(32°F), we strongly recommend you to keep the machine plugged in order to guarantee it running smoothly.**

## CARE AND MAINTENANCE

### Care and maintenance



#### Cleaning the Grille, Case and Remote Controller

- Turn the system off before cleaning. To clean, wipe with a soft, dry cloth. Do not use bleach or abrasives.

**NOTE:** Supply power must be disconnected before cleaning the indoor unit.

#### ⚠ CAUTIONS

- A cloth dampened with cold water may be used on the indoor unit if it is very dirty. Then wipe it with a dry cloth.
- Do not use a chemically treated cloth or duster to clean the unit.
- Do not use benzine, thinner, polishing powder, or similar solvents for cleaning. These may cause the plastic surface to crack or deform.
- Never use water hotter than 40°C(104°F) to clean the front panel, it could cause deformation of discoloration.

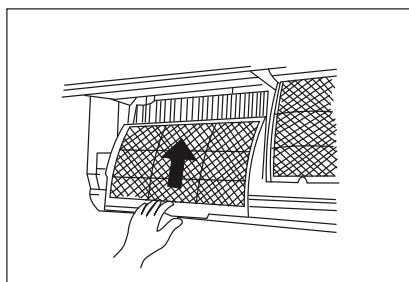
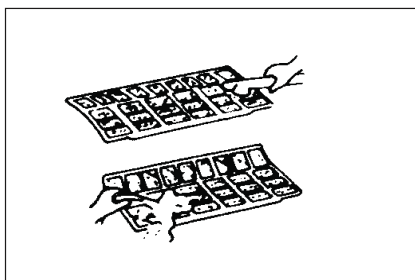
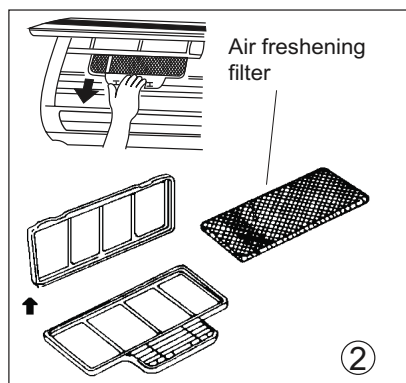
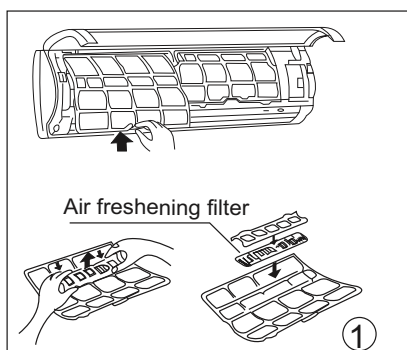
#### ■ WALL-MOUNTED TYPE

##### Cleaning the air filter

A clogged air filter reduces the cooling efficiency of this unit. Please clean the filter once every 2 weeks.

1. Lift the indoor unit panel up to an angle until it stops with a clicking sound.
2. Take hold of the handle of the air filter and lift it up slightly to take it out from the filter holder, then pull it downwards.
3. Remove the **Active Carbon & Dust Filter** from the indoor unit.
  - Clean the it once two weeks.
  - Clean the it with a vacuum cleaner or water, then dry it up in cool place.

## CARE AND MAINTENANCE



4. Remove the **Air Freshening Filter**(Optional filter: Plasma Dust collector/Silver Ion filter /Bio filter / Vitamin C filter) from its support frame.  
(The installation and removing method of the air freshening filter is different depending on the models, see the pictures marked ① and ② on the left.
  - Clean the air freshening filter at least once a month, and replace it every 4-5 months.
  - Clean it with vacuum cleaner, then dry it in cool place.
5. Install the air freshening filter back into position.
6. Insert the upper portion of air filter back into the unit taking care that the left and right edges line up correctly and place filter into position.

### Maintenance

If you plan to idle the unit for a long time, perform the following:

- (1) Operate the fan for about half a day to dry the inside of the unit.
- (2) Stop the air conditioner and disconnect power. Remove the batteries from the remote controller.
- (3) The outdoor unit requires periodic maintenance and cleaning. Do not attempt to do this yourself. Contact your dealer or servicier.

### Checks before operation

- Check that the wiring is not broken off or disconnected.
- Check that the air filter is installed.
- Check if the air outlet or inlet is blocked after the air conditioner has not been used for a long time.

### **⚠ Caution**

- Do not touch the metal parts of the unit when removing the filter. Injuries can occur when handling sharp metal edges.
- Do not use water to clean inside the air conditioner. Exposure to water can destroy the insulation, leading to possible electric shock.
- When cleaning the unit, first make sure that the power and circuit breaker are turned off.

## CARE AND MAINTENANCE

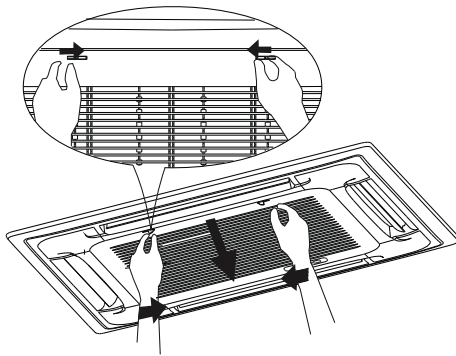


Fig. A

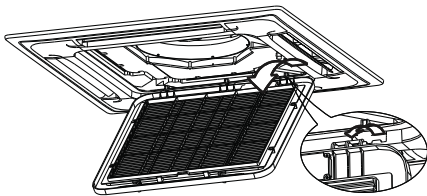


Fig. B

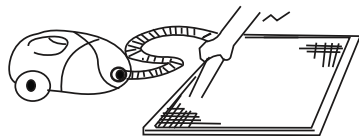


Fig. C

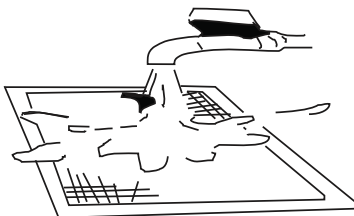


Fig. D

### ■ CASSETTE TYPE

1. Open the air-in grill  
Push the grill switches towards the middle simultaneously as indicated in Fig. A. Then pull down the air-in grill.

**Cautions:** The control box cables, which are originally connected with the main body electrical terminators must be pulled off before doing as indicated above.

2. Take out the air-in grill (together with the air filter shown in Fig. B). Pull the air-in grill down at 45° and lift it up to take out the grill.
3. Dismantle the air filter
4. Clean the air filter (Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place).

### ■ DUCT AND CEILING TYPE

1. Open the air-in grill  
Push the grill switches towards the middle simultaneously as indicated in follow figure sketch. Then pull down the air-in grill.

**Cautions:** The control box cables, which are originally connected with the main body electrical terminators must be pulled off before doing as indicated above.

2. Take out the air-in grill.
3. Dismantle the air filter
4. Clean the air filter (Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place).

- The air-in side should face up when using vacuum cleaner. (See Fig. C)
- The air-in side should face down when using water. (See Fig. D)

**Cautions :** Do not dry out the air filter under direct sunshine or with fire.

5. Re-install the air filter
6. Install and close the air-in grill in the reverse order of step 1 and 2 and connect the control box cables to the corresponding terminators of the main body.

**Note:** High-static Pressure Parvis Split Type has no air filter.



## CARE AND MAINTENANCE

### ■ CEILING AND FLOOR TYPE

#### For $\leq 36000$ Btu/h models

1. Open the air intake (see Fig.E1).
2. Take out the air filter(see Fig.E2).
3. Clean the air cleaning filter with water or vacuum cleaner, then dry it in cool place.
4. Re-install the air filter in the reverse order of Fig.E2.

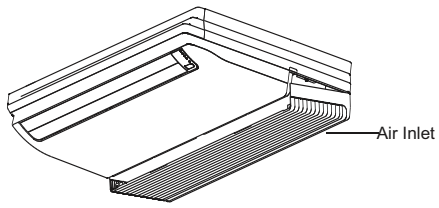


Fig.E1

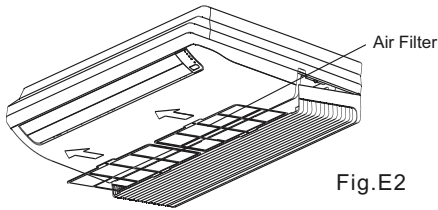


Fig.E2

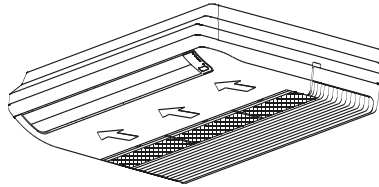


Fig.E3

#### For $\geq 48000$ Btu/h models

1. Directly pull out the air filter from air inlet as indicated in Fig.E3.
2. Clean the air cleaning filter with water or vacuum cleaner, then dry it in cool place.
3. Re-install the air filter in the reverse order of Fig.E3.

### ■ FLOOR AND STANDING TYPE(Console)

1. Open the front panel.(Refer to Fig. F1)

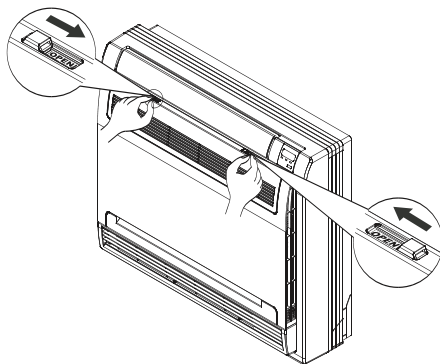


Fig.F1

## CARE AND MAINTENANCE

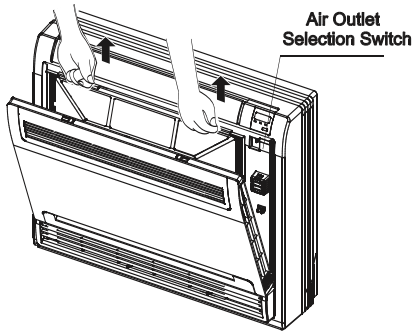


Fig.F2

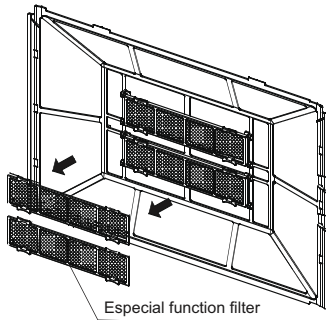


Fig.F3

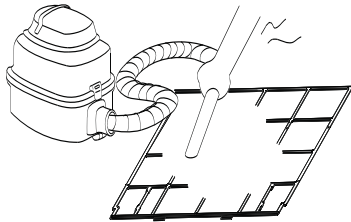


Fig.F4

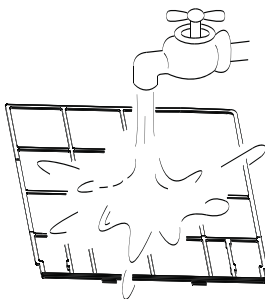


Fig.F5

### 2. Remove the air filter

Press the claws on the right and left of the air filter down slightly, then pull upward. (Refer to Fig.F2)

### 3. Take off the especial function filter

Hold the tabs of the frame, and remove the claws in 4 places. (Refer to Fig. F3)  
(The especial function filter can be renewed by washing it with water once every 6 months. We recommend replacing it once every 3 years.)

### 4. Clean the air filter

Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place.

The air-in side should face up when using vacuum cleaner. (see Fig.F4)

The air-in side should face down when using water (see Fig. F5).

### 5. Set the air filter and the especial function filter as they were and close the front panel.

Operation without air filters may result in troubles as dust will accumulate inside the indoor unit.

#### ⚠ CAUTION:

Do not dry the air filter by heat or under the direct sunlight.

## CARE AND MAINTENANCE

### ■ DUCT /CEILING TYPE

1. For the unit is a rear ventilated one, please remove the screws (2 pieces) fixed on the filter and take down the filter away from the unit. See Fig.G1.
2. For the unit is a descensional ventilated one, please push the filter up slightly to let the position retainer escape away from the flange fixed holes, and take off the filter according to the arrow direction shows in the Fig.G2.
3. Clean the air filter. Vacuum cleaner or pure water may be used to clean the air filter. If the dust accumulation is too heavy, please use soft brush and mild detergent to clean it and dry out in cool place.
4. The air-in side should face up when using vacuum cleaner.(see Fig.G3)  
The air-in side should face down when using water (see Fig. G4).

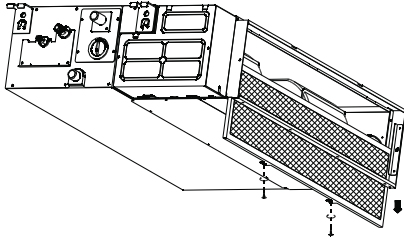


Fig.G1

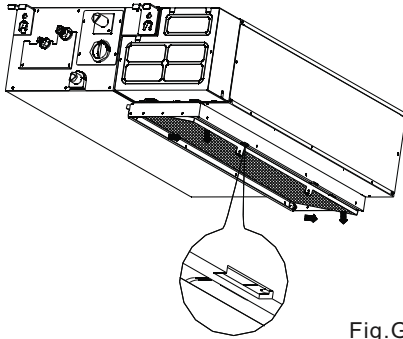


Fig.G2

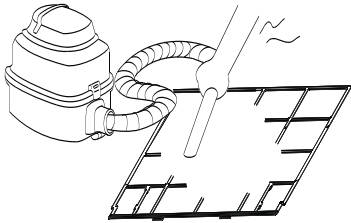


Fig.G3

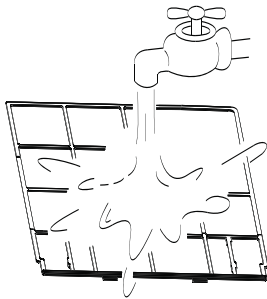


Fig.G4

## **OPERATION TIPS**

---

### **Maintenance**

**If you plan to idle the unit for a long time, perform the following:**

1. Clean the indoor unit and air filter.
2. Select FAN only mode, let the indoor fan run for a while to dry the inside of the unit.
3. Disconnect the power supply and remove battery from the remote control.
4. Check components of the outdoor unit periodically. Contact a local dealer or a customer service centre if the unit requires servicing.

**Note:** Before you clean the air conditioner, be sure to switch the unit off and disconnect the power supply plug.

**When the air conditioner is to be used again:**

- Use a dry cloth to wipe off the dust accumulated on rear air intake grille, in order to avoid the dust blowing out from the indoor unit.
- Check that the wiring is not broken off or disconnected.
- Check that the air filter is installed.
- Check if the air outlet or inlet is blocked after the air conditioner has not been used for a long time.

### **Operation Tips**

The following events may occur during normal operation.

#### **1. Protection of the air conditioner.**

##### **Compressor protection**

- The compressor can't restart for 3 minutes after it stops.

##### **Anti-cold air (Cooling and heating models only)**

- The unit is designed not to blow cold air on HEAT mode, when the indoor heat exchanger is in one of the following three situations and the set temperature has not been reached.

A) When heating has just starting.

B) Defrosting.

C) Low temperature heating.

- The indoor or outdoor fan stop running when defrosting (Cooling and heating models only).

##### **Defrosting (Cooling and heating models only)**

- Frost may be generated on the outdoor unit during heat cycle when outdoor temperature is low and humidity is high resulting in lower heating efficiency of the air conditioner.
- During this condition air conditioner will stop heating operation and start defrosting automatically.
- The time to defrost may vary from 4 to 10 minutes according to the outdoor temperature and the amount of frost buildup on the outdoor unit.

#### **2. A white mist coming out from the indoor unit**

- A white mist may generate due to a large temperature difference between air inlet and air outlet on COOL mode in an indoor environment that has a high relative humidity.
- A white mist may generate due to moisture generated from defrosting process when the air conditioner restarts in HEAT mode operation after defrosting.

#### **3. Low noise of the air conditioner**

- You may hear a low hissing sound when the compressor is running or has just stopped running. This sound is the sound of the refrigerant flowing or coming to a stop.
- You can also hear a low "squeak" sound when the compressor is running or has just stopped running. This is caused by heat expansion and cold contraction of the plastic parts in the unit when the temperature is changing.
- A noise may be heard due to louver restoring to its original position when power is first turned on.

## OPERATION TIPS

**4. Dust is blown out from the indoor unit.**

This is a normal condition when the air conditioner has not been used for a long time or during first use of the unit.

**5. A peculiar smell comes out from the indoor unit.**

This is caused by the indoor unit giving off smells permeated from building material, from furniture, or smoke.

**6. The air conditioner turns to FAN only mode from COOL or HEAT (For cooling and heating models only) mode.**

When indoor temperature reaches the temperature setting on air conditioner, the compressor will stop automatically, and the air conditioner turns to FAN only mode. The compressor will start again when the indoor temperature rises on COOL mode or falls on HEAT mode (For cooling and heating models only) to the set point.

**7. Dripping water may generate on the surface of the indoor unit when cooling in a high relative humidity (relative humidity higher than 80%). Adjust the horizontal louver to the maximum air outlet position and select HIGH fan speed.**

**8. Heating mode (For cooling and heating models only)**

The air conditioner draws in heat from the outdoor unit and releases it via the indoor unit during heating operation. When the outdoor temperature falls, heat drawn in by the air conditioner decreases accordingly. At the same time, heat loading of the air conditioner increases due to larger difference between indoor and outdoor temperature. If a comfortable temperature can't be achieved by the air conditioner, we suggest you use a supplementary heating device.

**9. Auto-restart function**

Power failure during operation will stop the unit completely.

For the unit without Auto-restart feature, when the power restores, the OPERATION indicator on the indoor unit starts flashing. To restart the operation, push the ON/OFF button on the remote controller. For the unit with Auto-restart feature, when the power restores, the unit restarts automatically with all the previous settings preserved by the memory function.

**10. Lightning or a car wireless telephone operating nearby may cause the unit to malfunction.**

Disconnect the unit with power and then re-connect the unit with power again. Push the ON/OFF button on the remote controller to restart operation.

## TROUBLESHOOTING TIPS

**Stop the air conditioner immediately if one of the following faults occur. Disconnect the power and contact the nearest customer service center.**

<b>Trouble</b>	If the E( 0,1.....) or P( 0, 1 .....) code appears on the LED(LCD)window, disconnect the power and contact the service people.
	Fuse blows frequently or circuit breaker trips frequently.
	Other objects or water penetrate the air conditioner.
	The remote controller won't work or works abnormally.
	Other abnormal situations.

<b>Malfunctions</b>	<b>Cause</b>	<b>What should be done?</b>
<b>Unit does not start</b>	Power cut	Wait for power to be restored.
	Unit may have become unplugged.	Check that plug is securely in wall receptacle.
	Fuse may have blown.	Replace the fuse.
	Battery in Remote controller may have been exhausted.	Replace the battery.
	The time you have set with timer is incorrect.	Wait or cancel timer setting.
<b>Unit not cooling or heating (Cooling/ heating models only) room very well while air flowing out from the air conditioner</b>	Inappropriate temperature setting.	Set temperature correctly. For detailed method please refer to "Remote controller instruction" section.
	Air filter is blocked.	Clean the air filter.
	Doors or Windows are open.	Close the doors or windows.
	Air inlet or outlet of indoor or outdoor unit has been blocked.	Clear obstructions away first, then restart the unit.
	Compressor 3 minutes protection has been activated.	Wait.

If the trouble has not been corrected, please contact a local dealer or the nearest customer service center. Be sure to inform them of the detailed malfunctions and unit model.

**Notes: Do not attempt to repair the unit yourself.  
Always consult an authorised service provider.**