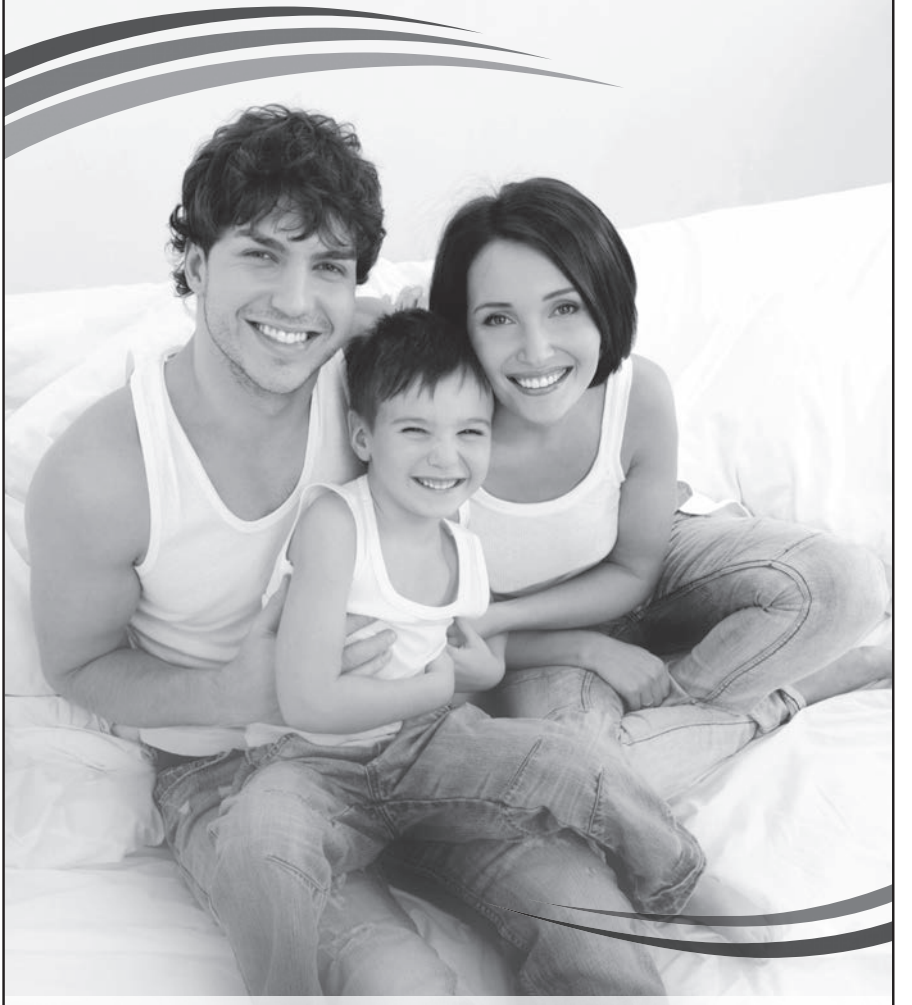
DUCTLESS MINI SPLIT HEAT PUMP

Owner's manual



Please read this owner's manual carefully before operating, and keep it for reference.

OUELLET

00685-14/04/2014

MODEL :
OTP-B09000D
OTP-B12000D
OTP-B18000D
OTP-B24000D

CONTENTS

In accordance with the company's policy of continual product improvement, this appliance's aesthetic and dimensional characteristics, technical data and accessories may be changed without notice.

GENERAL INFORMATION

The figures in this manual may differ from the actual materials. Please refer to the material objects for reference.

This symbol represents that actions that must be avoided.

This symbol represents that actions that must be done.

Do not dispose of this product with unsorted municipal waste. This product must be disposed of separately according to electronic waste regulations.

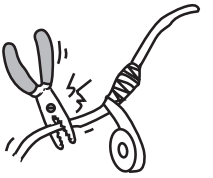
Notices before use

Please read the following carefully before operating

When the voltage is very high, the components can easily be damaged. When the voltage is very low, the compressor vibrates violently, which may damage the refrigerant system, the compressor and the electrical components. The voltage level should be stable; there should not be a large variance in voltage.

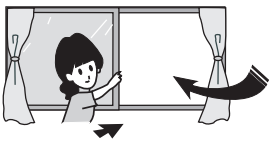
Disconnect the power supply when the heat pump will not be in use for an extended period of time. Accumulated dust may cause over-heating or fire.

Never splice the power cord or use an extension cord.

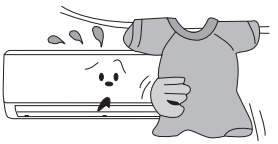


This may cause overheating or fire.

Do not leave windows and doors open for a long period of time while operating the heat pump. This will decrease the air conditioning capacity.



Do not block the air intake or outlet vents on both the outdoor and indoor units. This may decrease the air conditioning capacity or cause a malfunction.

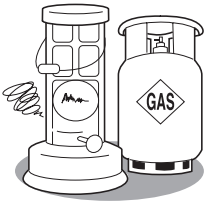


The power supply must use a special circuit with air switch protection and the proper capacity. The unit turns on and off automatically based on your settings. Frequently turning the unit off and on may negatively affect or damage the unit.

If there is burning smell or smoke, please turn off the power supply and contact the service center.

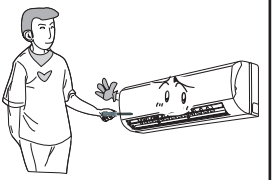
If the probem continues, the unit may be damaged, and may cause electric shock or fire.

Keep combustilbles at least 1 m from the units.



If they are too close, it may cause a fire or explosion.

Do not attempt to repair the air conditioner yourself.



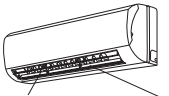
Incorrect repairs may cause electric shock or fire. Contact the service.

Notices for use

Please read the following carefully before operating

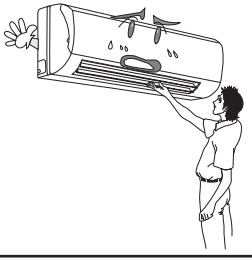
Do not cut or damage the power cords and control wires. If they are damaged, have them replaced by a professional.

When the unit is in use, use the remote control to adjust the vertical and lateral air direction.

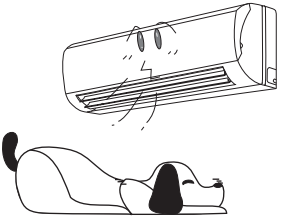


Swing louver Guide louver

Do not insert your hands or any objects into the air intake or outlet vents.

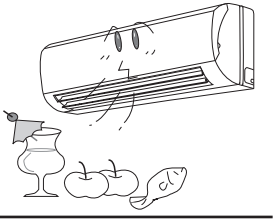


Do not allow the air from the vents to blow directly on animals or plants, as it may harm them.

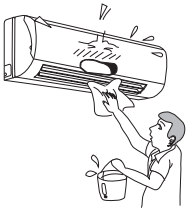


Do not allow cold air to blow directly on a person for a long period of time, as this may cause health problems.

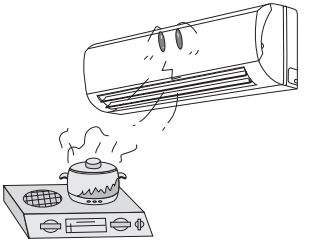
Do not use the heat pump for other purposes, such as drying clothes, preserving foods, etc.



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



Do not place a space heater near the heat pump.



Notices for use

Operating principle and special functions for cooling

Principle:

The heat pump absorbs heat in the room and sends it outside, so as the indoor ambient temperature decreases, the cooling capacity will increase or decrease based on the outdoor ambient temperature.

Anti-freezing function

If the unit is running in COOL mode and on a low temperature, frost will form on the heat exchanger. When the indoor heat exchanger temperature goes below 0 °C, the indoor unit's microcomputer will stop runnig the compressor to protect the unit.

Operating principle and special functions for heating

Principle:

* The heat pump absorbs the heat in the room and sends it outside will increase, its heating capacity will decrease by outdoor ambient temperature.
  So as the indoor ambient temperature increases, so does the room heating capacity.
* If the outdoor temperature decreases, please use other heating/ventilating equipment.

Defrosting:

* When the outdoor temperature is low but the humidity is high, and the unit has been running for a long period of time, frost will form on the outdoor unit.
  The heating will stop running for 8 - 10 minutes while the auto-defrost is functioning.
* While auto-defrosting, the fan motors on both the indoor and outdoor units will stop.
* While defrosting, the indoor indicator flashes, and the outdoor unit may emit vapor.
  This is due to the defrosting, and is not a malfunction.
* After the defrosting has finished,the heating will re-start automatically.

Anti-freezing function:

While in "HEAT" mode, in conjunction with one of the following statues, the indoor heat exchanger hasn't reached the set temperature, the indoor unit will not run, in order to prevent cool air from blowing. (Within 3 mins)
1.Heating starts. 2.After auto-defrosting ends. 3.Heating in low temperatures.

The unit's climate type can be found on the nameplate.

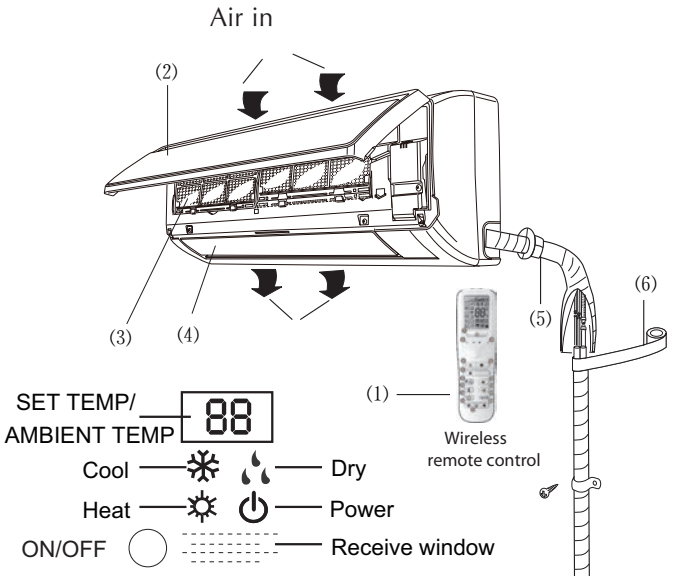
Notices for use

Working temperature range		
	Indoor sideDB/WB(oC)	Outdoor sideDB/WB(oC)
Maximum cooling	32/23	43/26
Minimum cooling	21/15	21/-
Maximum heating	27/---	24/18
Maximum heating	20/---	-7/-8

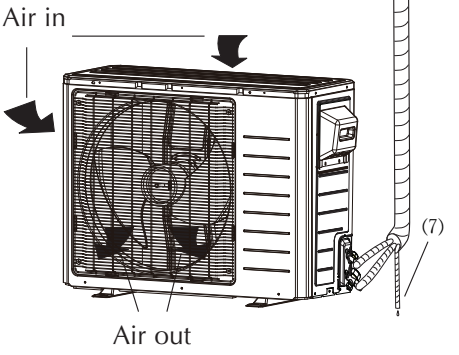
The operating temperature range (outdoor temperature) for cooling unit is 10ºC~ 48ºC for cooling and heating unit is -15ºC ~ 48ºC.

Parts

Indoor unit



Outdoor unit



(1) Remote control
(2)Front panel
(3) Filter
(4)Guide louver
(5) Wall pipe
(6) Bind tape
(7) Drainage pipe

Note: This is just the schematic plan, please refer to the actual product

How to use the wireless remote control

• Remote control description

1. **ON/OFF**
   Press to start or stop the unit.

2. **- :** Press to decrease the temperature setting.

3. **+ :** Press to increase the temperature setting.

4. **MODE**
   Press to select the running mode
   (« AUTO », « COOL », « DRY », « FAN » ET « HEAT »).

5. **FAN**
   Press to set the fan speed.

6. **SWING**
   Press to set the swing angle of the louvers.

7. Press to set the OUTSIDE or RECYCLED AIR function.

8. **SLEEP**

9. **TEMP**

10. **T-ON**
    Press to set the auto-on timer.

11. **CLOCK**
    Press to set the clock.

12. **T-OFF**
    Press to set the auto-off timer.

13. **TURBO**

14. **X-FAN**

15. **LIGHT**
    Press to turn the light on/off.

* Optional

How to use the wireless remote control

• Remote control description

1 **ON/OFF** ⏻

Press this button to turn the unit on. Press again to turn the unit off.

2 **−** :

Press this button to decrease the set temperature. Hold it down for longer than two seconds to decrease the set temperature at a faster rate. The set temperature is not adjustable in AUTO mode.

3 **+** :

Press this button to increase the set temperature. Hold it down for longer than two seconds to increase the set temperature at a faster rate. The set temperature is not adjustable in AUTO mode.

4 **MODE** △

Press this button to select a mode from a sequence of AUTO, COOL, DRY, FAN, and HEAT *, as follows:

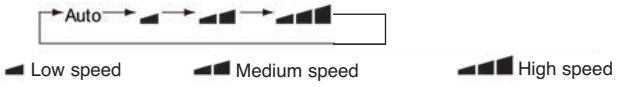
AUTO ▶ COOL ▶ DRY ▶ FAN ▶ HEAT*

*Note: Only for models with the heating function

AUTO is the default mode when the unit is started. When in AUTO mode, the set temperature will not be displayed on the unit's LED screen, and the unit will automatically select the suitable running mode based on the room temperature.

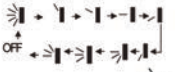
5 **FAN**

Press this button to select the Fan Speed from a sequence of AUTO,



6 **SWING**

Press this button to set the swing angle of the louvers, which changes in a sequence as below:



This is a universal remote control. If the , or positions are chosen, the unit will carry out the command

indicates the guide louver swings in this sequence

How to use the wireless remote control

7

Press this button to select either outside or recycled air. Press once for the recycled air mode, and the LCD screen displays " ". Press a second time to use set both the recycled and outside air modes, and the LCD screen displays "" and "" . Press a third time to stop the simultaneous outside and recycled air mode. Press a fourth time to run in the outside air mode, and the LCD screen displays "". Press the button again to repeat the above operation.

8 **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.

9 **TEMP**

Press this button to set the indoor temperature setting or the indoor ambient temperature. When the indoor unit is first turned on, it will display the set temperature. If the temperature display is changed to "", the ambient temperature will be displayed. Either five seconds later or if it receives a remote control signal within five seconds, the set temperature will again be displayed. If the user hasn't yet set temperature display status,it will display the setting temperature.

10 **T-ON**

Press this button to initiate the auto-ON timer. To cancel the auto-timer program, simply press this button again. After press of this button, disappears and "ON" blinks. 00:00 is displayed for ON time setting. Within 5 seconds, press + or - button to adjust the time value. Every press of either button changes the time setting by 1 minute. Holding down either button rapidly changes the time setting by 1 minute and then 10 minutes. Within 5 Seconds after setting, press TIMER ON button to confirm.

11 **CLOCK**

Press the CLOCK button and the "" will flash. Within 5 seconds, press + or - to set the time. Hold down either of those buttons for two seconds or longer to increase or decrease the time by 1 minute every 0.5 second and then by 10 minutes every 0.5 second. After setting the time and while it is flashing, press the CLOCK button again to confirm the set time.

12 **T-OFF**

Press this button to initiate the auto-off timer. To cancel the auto-timer program, simply press the button again. TIMER OFF setting is the same as TIMER ON.

13 **TURBO**

Press this button to activate/deactivate the Turbo function, which enables the unit to reach the preset temperature in the shortest time. In COOL mode, the unit will blow cool air at super-high fan speed. In HEAT mode, the unit will blow warm air at super-high fan speed.

14 **X-FAN**

If X-FAN is pressed when the unit is in COOL or DRY mode, the icon will be displayed and the indoor fan will continue running for 10 minutes in order to dry the indoor unit, even if the unit has been turned off.

When the unit is turned on, X-FAN OFF is the default setting. X-FAN is not available in the AUTO, FAN or HEAT modes.

15 **LIGHT**

Press LIGHT to turn on the display light and press again to turn it off. If the light is turned on, "" is displayed. If the light is turned off, "" disappears.

How to use the wireless remote control

⑯ **COMBINATION OF "+" AND "-" BUTTONS: LOCK**
Press "+ " and "-" buttons at the same time to lock or unlock the keypad. If the remote control is locked, " 🔒" is displayed. In this case, when any button is pressed, " 🔒" blinks three times.

⑰ **COMBINATION OF "MODE " AND "-" BUTTONS: SWITCH BETWEEN FAHRENHEIT AND CELSIUS**
When the unit is OFF, press "MODE" and "- " at the same time to switch between °C and °F.

⑱ **COMBINATION OF "TEMP" AND "CLOCK" BUTTONS: ENERGY-SAVING FUNCTION**
When the unit is running in the COOL mode, press “TEMP” and “CLOCK” simultaneously to the start energy-saving function. The remote control displays “SE”. Repeat the operation to cancel the function

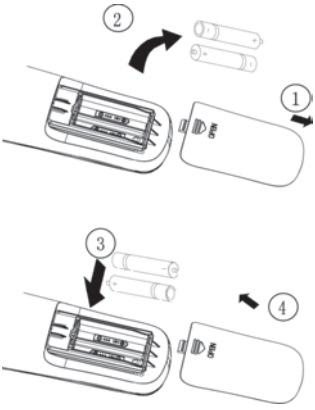
⑲ **COMBINATION OF *TEMP* AND CLOCK BUTTONS 8°C HEATING FUNCTION**
When the unit is running in the HEAT mode, press “TEMP” and “CLOCK” simultaneously to start the 8°C heating function. The remote control displays “Ⓢ” and a selected temperature of “8°C”. (46°F if Fahrenheit is chosen).
Repeat the operation to cancel the function.

⑳ **ABOUT THE BACK-LIGHTING FUNCTION**
When first turned on, the unit lights turn on for four seconds. They turn on for three seconds when pressed again.

How to use the wireless remote control

Changing Batteries and Other notices

1. Lightly press the ⊡ and slide in the direction the arrow is pointing to remove the back cover of the wireless remote control. (As show in figure)
2. Take out the old batteries. (As show in figure)
3. Insert two new AAA1.5V dry batteries, and note the pole placement. (As show in figure)
4. Attach the back cover of the wireless remote control. (As show in figure)



Sketch map for changing batteries

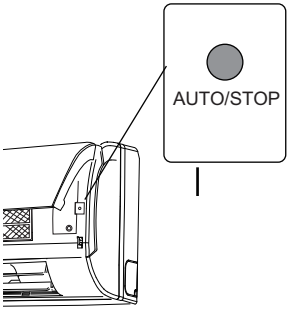
- **NOTE:**
- When changing the batteries, do not use the old batteries. This may cause the wireless remote control to malfunction.
- If the wireless remote control will not be used for an extended period of time, remove the batteries so the liquid won't leak and damage the wireless remote control.
- The remote control must be in the receiving range to function properly.
- The remote control should be at least 1m away from the TV set or stereo sound sets.
- If the wireless remote control is not functioning properly, remove the batteries, wait 30s and then replace them. If problems continue, replace the batteries.

Emergency Operation

If the wireless remote control is lost or damaged, please use the manual switch. The unit will run in Auto Run mode and will not change the temperature setting and fan speed.

The manual switch is operated as follows:

- To start: When the unit stops running, press the ⏻ button. The unit will start in AUTO RUN mode. The microcomputer will accord with the room temperature to select the (COOL, HEAT, FAN) mode automatically, to obtain the most comfortable temperature.
- To stop: When the unit is running, press the ⏻ button on the manual switch and the unit will turn off.



Care and cleaning

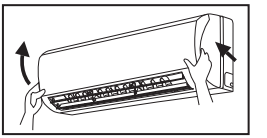
⚠ CAUTION

- Turn the power off and remove the power plug before cleaning the heat pump. Failure to do so may cause electric shock.
- Never put water directly into the indoor unit to clean it because this way cause an electric shock.
- Volatile liquid (e.g. thinner or gasoline) will damage the heat pump. (Wipe the units with a soft, dry cloth, or a cloth slightly moistened with water or cleanser.)

Clean the front panel (before cleaning)

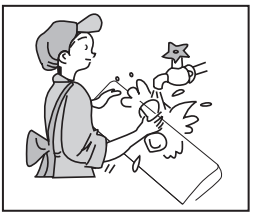
1 **Take off the front panel**

Place your hands in the slots on either side of the front panel and pull the panel in the direction indicated by the arrows. Then remove the panel.



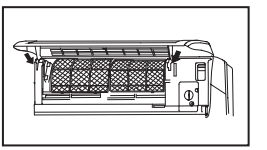
2 **Clean**

Clean with a soft brush, water and neutral detergent and then dry it. (Note: Before cleaning the unit, please take the display box down first, then wash the panel, if the unit has display on the front panel. Never use water above 45 °C to wash the panel, or it could cause deformation or discoloration.)



3 **Install the front panel**

Place the front panel's two supports into the slots, in the direction indicated by the arrows and close the front panel. As show in right figure.



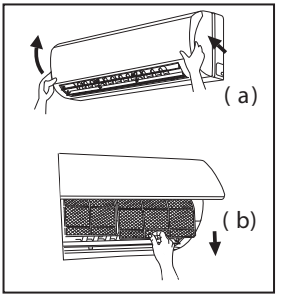
Cleaning the air filters (Recommended once every three months)

Note: If there is a large amount of dust near the heat pump , the air filters should be cleaned regularly. After removing the filter, do not touch the fin of indoor unit, in order to avoid hurt your fingers.

Care and cleaning

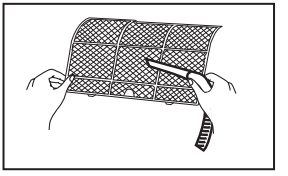
1 **Remove the air filter**

Open the surface panel at an angle, pull the air filter downward, and remove it.



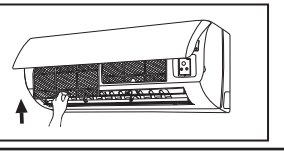
2 **Clean**

To clean the dust on the filters, you can either use a vacuum cleaner, or wash them with warm water and a neutral detergent if very dirty (i.e. oil stains). The water should below 45°C. Dry the filter in the shade.
NOTE: Never use water above 45 °C to wash, or it can cause deformation or discoloration. Never place over a heat source, or it may cause a fire or deformation.



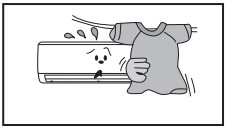
3 **Reinsert the filters**

Reinsert the filters in the direction indicated by the arrow, then lower the surface panel and latch it.



Check Before Use

1 Be sure that nothing obstructs the air outlet and intake vents.



2 Check that the ground wire is properly connected.

3 Check that the heat pump batteries are working.

4 Check that the outdoor unit's stand is damaged.
If damaged, please contact the dealer.

Maintain After Use

1 Turn main power off.

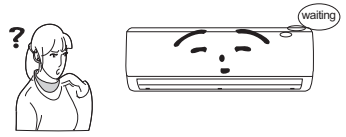
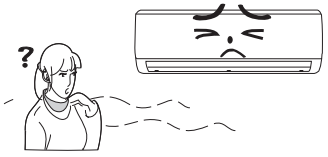
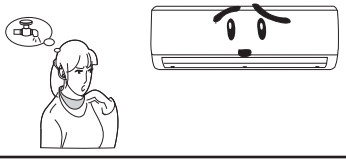
2 Clean the filter and indoor and outdoor units' bodies.

3 Repaint any rust spots on the outdoor unit to prevent it from spreading.

Troubleshooting

CAUTION

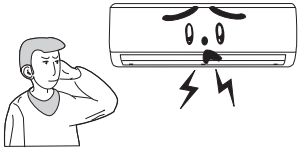
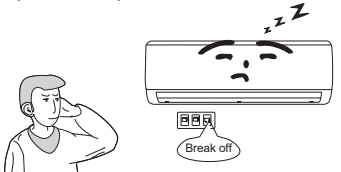
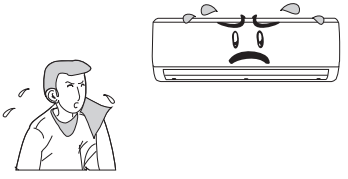
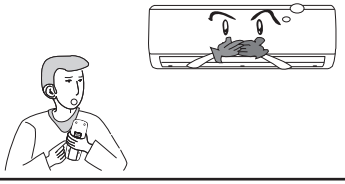
Do not repair the heat pump yourself. Incorrect repairs may cause electric shock or fire, so please contact an authorized service center for professional repair. You can save time and repair fees by going over the troubleshooting tips below.

Problem	Troubleshooting
The unit does not immediately start the heat pump is turned on. 	When the heat pump is stopped, it will only start again after approximately 3 minutes.
There's an unusual smell coming from the outlet when the unit starts. 	This is caused by the odors in the room which have been absorbed into the heat pump.
Sound of water flow can be heard during operation. 	This is caused by the refrigerant flowing inside the unit.
Mist is emitted during cooling function. 	The air of the room is rapidly cooled by the cold wind and it looks like fog.

Troubleshooting

CAUTION

Do not repair the heat pump yourself. Incorrect repairs may cause electric shock or fire, so please contact an authorized service center for professional repair. You can save time and repair fees by going over the troubleshooting tips below.

Problem	Troubleshooting
A creaking noise can be heard when the unit starts or stops. 	This is caused by the deformation of plastic due to temperature changes.
Heat pump does not operate at all. 	• Has the power been turned off ? • Is the leakage protection switch working? • Is the voltage higher or lower? • Is TIMER ON function activated? • Is the wiring loose?
Cooling (Heating) efficiency is not good. 	• Is the SET TEMP. suitable? • Is the air inlet or outlet obstructed? • Are the air filters dirty? • Are the windows and doors closed? • Is the indoor fan speed set at low speed? • Is there any other heat source in your room?
The wireless remote control is not working. 	• The remote control may occasionally stop working when the heat pump's functions are changed too frequently. Remove the power plug and insert it again to restart the appliance. • Is the remote control out of the range of the indoor unit? Are there any obstructions between the remote control and the signal receptor? • Replace the worn batteries in the remote control if the voltage of the batteries is not sufficient.

Troubleshooting

CAUTION

Do not repair the heat pump yourself. Incorrect repairs may cause electric shock or fire, so please contact an authorized service center for professional repair. You can save time and repair fees by going over the troubleshooting tips below.

Problem	Troubleshooting
Indoor unit is not delivering air	• In HEAT mode, when the temperature of indoor heat exchanger is very low, the air will stop blowing in order to prevent cool air from entering the room. (Within 3 min) • In HEATmode, when the outdoor temperature is low or there is high humidity, frost will form on the outdoor heat exchanger, and the unit will automatically begin to defrost. The indoor unit will stop blowing air for 3-12 mins. During the defrosting process, water or vapor may be produced. • In dehumidifying mode, sometimes the indoor fan will stop to keep the water from vaporizing again and the temperature from rising.
Moisture on air outlet ventMoisture on air outlet vent	• If the unit is running in conditions with high humidity for a long time, moisture will condensate on the air outlet grill and drip off.
Water leakage in the room	• The air humidity is on the high side. • The condensated water over-flowed. • The indoor unit's drainage pipe is loos.
Noise from indoor unit emitted.	• The sound of fan or compressor relay is switching on or off. • When the defrosting function starts or stops, it will make noises. This is due to the refrigerant flowing in the reverse direction.

Immediately stop operating all units, remove the power plug and contact the dealer in following situations.

- There is harsh sound during operation.
- There are terrible odors during operation.
- Water is leaking into the room.
- Air switch or protection switch often breaks.
- Water or other liquid spilled into unit.
- There is an abnormal heat in power supply cord and power plug.

→ Stop running and remove the plug.

Installation service - Notices for installation

Important Notices

1. The unit must be installed by a qualified technician according to local regulations and the instructions in this manual.

2. If the heat pump the instructions in plug, connect it directly to a fixed circuit, A breaker should be installed in the fixed circuit. All the breaker's poles should be switched off and the distance of the contact should be at least 3mm.

Basic Requirements For Installation Position

Installing the unit in the following ing the unit may cause malfunctions. If it is unavoidable please contact with service. Any place where:

- Strong heat sources, vapors, flammable gas or volatile fumes or liquids are emitted.
- High-frequency waves are generated by radio equipment, welders and medical equipment.
- High levels of salinity exist, such as on the coast.
- There is oil (machine oil) the air.
- Sulfuric gas is generated, such as near hot springs.
- Other special circumstances exist.

Indoor Unit Installation Position Selection

1. The air inlet and outlet vent should be free of obstruction. Ensure 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 the outdoor unit.

3. Select a location that is out of the reach of children.

4. Use an installation location that is strong enough to withstand the full weight and vibration of the unit, and that will not increase the noise.

5. Be sure to leave enough space to allow access for routine maintenance.

6. Select a place about 1m or more away from a TV set 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 is in line with the installation dimension diagram requirements.

Safety Requirements For Electric Appliances

1. The power supply must be the rated voltage an AC exclusive circuit. The power cable diameter should be appropriate.
2. Do not drag or stretch the power cable.
3. The cable should be grounded, and it should be connected to the special grounding device. Installation must be done by a professional.
4. The air switch must have the functions of magnetic tripping and heat tripping, in order to protect the short circuit and overloading.
5. The minimum distance from the unit and combustive element is 1.5m.

Note:

- Make sure that the Live wire or Zero line as well as the ground wire in the family power socket is properly connected. It should be stable and not indicate a short circuit in the diagram.
- An incorrect connection may cause fire.

Grounding Requirements

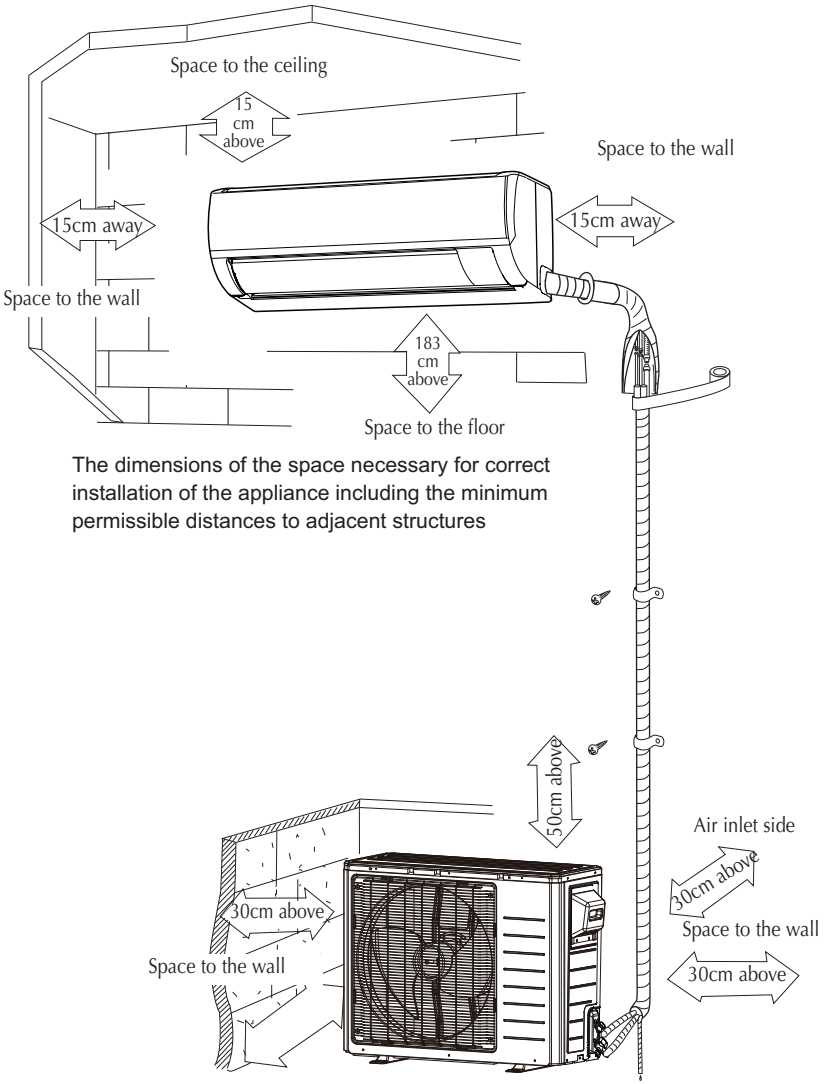
1. This a conditioner is a type I electric appliance, so ensure that the proper grounding measures have been taken.
2. The two-color, yellow-green wire in the heat pump is the grounding wire and cannot be used for other propose. It cannot be cut off and be fix it by screw, otherwise it would cause electric shock.
3. The grounding resistance should comply with national regulations.
4. The power source must provide a reliable grounding terminal. Please do not connect the grounding wire to the following :

1 Tap water pipe **2** Gas pipe
3 Contamination pipe **4** Other places that professionals consider unreliable.

Others

1. Refer to the circuit diagram sticker on the unit for details on connecting the power cable to the unit and other connections.
2. Refer to the silk-screen on the controller or fuse sleeve for information on fuse replacement and the unit's value rating. .
3. The appliance must be installed in accordance with national electrical wiring regulations.
4. This appliance is not intended for use by people (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning the use of the appliance by a person who is responsible for their safety.
5. Children should be supervised to ensure that they do not play with the appliance.
6. Installation by anyone but a certified OUELLET technician will void warranty.

Installation dimension diagram



The dimensions of the space necessary for correct installation of the appliance including the minimum permissible distances to adjacent structures

Note : This is just the schematic plan, please refer to the actual product.

Installing the indoor unit

Install the Rear Panel

1. Always mount the rear panel horizontally. As the water drainage pipe is on the left, when adjusting the rear panel, this side should not be too high; the right side should be slightly higher.

2. Attach the rear panel to the selected location.

3. Be sure that the rear panel has been attached firmly enough to withstand the 60 kg of weight. The weight should be evenly shared by each screw.

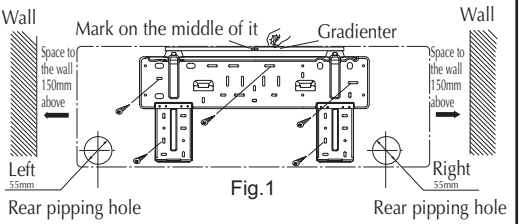
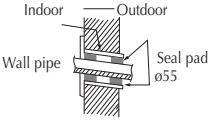


Fig.1

Install the Piping Hole

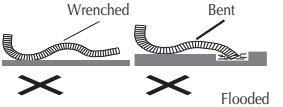
1. Make the piping hole in the wall at a slight downward slant to the outdoor side

2. Insert the piping-hole sleeve into the hole to prevent the connection piping and wiring from being damaged when passing through the hole.



Install the Water Drainage Pipe

1. To ensure good drainage, the drain hose should be placed at a downward angle.
2. Do not wrench or bend the drain hose or it will flood.
3. When the long drainage hose passe through the indoor section, the insulation materials should be wrapped.



Connect indoor and outdoor electric wires

1. Lift the front panel up.
2. Unscrew off the fixing screw in the cover plate and remove the cover plate Fig.6.
3. Put the power connection cable through the back of indoor unit wire hole and pull it through..
4. All the wiring should be connected according to the circuit diagram on the unit.
5. Place the power connection cable into the wire groove, cover with the sheath and then the cover plate. Screw in the fixing screw and tighten the connection wire.
6. Cover the front panel cover.
7. For the cooling and heating unit, the signal control wire can be passed through the indoor unit connection. Use the wire clip that is under the body case, tighten the signal control wire.

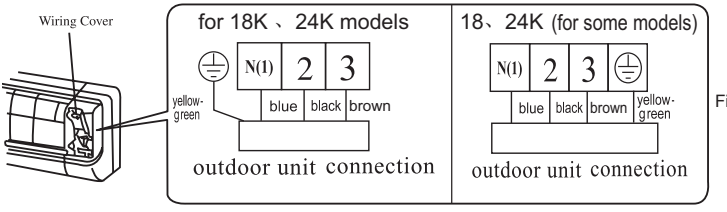


Fig.6

Installing the indoor unit

NOTE:

If the electrical wire is not long enough, please contact the authorized service centre to buy an exclusive electric wire of the correct length. The wire are not allowed

- The electric wiring must be correctly connected. Incorrect connection may cause a malfunction.
- Tighten the terminal screw in order to prevent loose wirring.
- After tighten the screw, gently pull the wire to confirm that it is firmly attached.
- If the grounding wire is incorrectly connected, it may cause electric shock.
- The cover plate must be attached and the connection wire tightened. Poor installation will allow dust, moisture or other outside materials into the unit, which may lead to fire or electric shock.
- A circuit-breaker and air switch of correct capacity must be installed.

Install the Indoor Unit

- The piping can exit from right, right rear, left, left rear.

1. When routing the piping and wiring from the left or right side of indoor unit, cut off the tailings from the chassis as necessary (show in Fig.2)
   (1).Cut off the tailings 1 when routing the wiring only;
   (2).Cut off the tailings 1 and tailings 2 when routing both the wiring and piping.(or 1,2,3);

2. Take out the piping from the body case, wrap the piping's electric wire and water pipe with tape and put them th- rough the piping hole. (As show in Fig. 3)

3. Hang the mounting slots of the indoor unit on the upper tabs of the rear panel and check that it is firm enough. (As show in Fig.4)

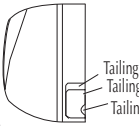


Fig.2

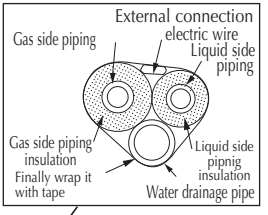
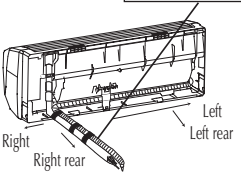
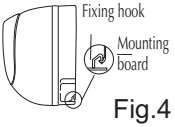


Fig.3





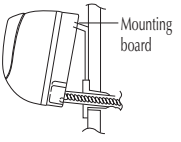


Fig.4

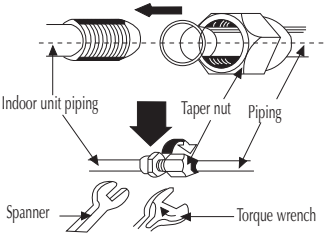
Install the Connection Pipe

1. Align the centre of the piping flare with the relevant valve.

2. Screw in the flare nut by hand and then tighten the nut with a spanner and torque wrench. Refer to the following.

Torque tightening table

Hex nut diameter	Torque(N·m)
Ø6	15~20
Ø 9.52	31~35
Ø 12	50~55
Ø 16	60~65
Ø 19	70~75



NOTE: First attach the connection pipe to the indoor unit, then to outdoor unit. Do not allow the pipe to bend and, do not damage the connection pipe. Do not over-tighten the joint nut or it may cause leakage.

Install outdoor unit

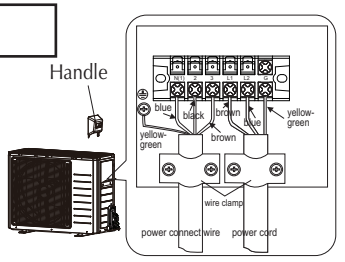
Electric wiring

1. Disassemble the handle on the outdoor unit right side plate.

2. Take off cord anchorage. Connect and fix power connect cord (for cooling and heating unit,connect and fix power connect cord and signal control wire)to terminal block.

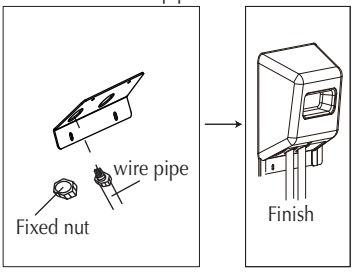
3. Fix the power connection cable with cord anchorage, (for cooling and heating unit, use the cord anchorage to fix the power connection cable and the signal control wire).

4. Ensure wire has been fixed well.



NOTE:
- Wrong wiring may cause spare parts malfunction.
- After the cable fixed, make sure there should be a free space between the connection and connection and fixing place on the lead wire.

Install the over line pipe



Air purging and leakage test

1. Connect charging hose of manifold valve to charge 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 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. (If noise of vacuum pump has been changed, the reading of multimeter is 0) Then tighten the nut.
5. Keep evacuating for more than 15mins and make sure the reading of multi-meter is -1.0 x 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. (As shown in Fig.9)

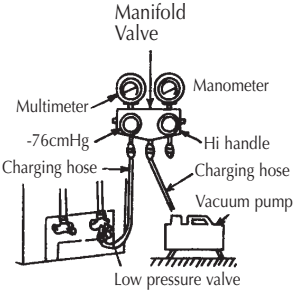
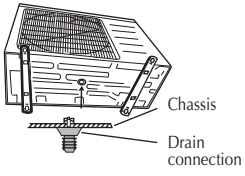


Fig.9

Condensate drainage of outdoor unit (no for cooling only)

The condensate and defrosting water formd during heating in the outdoor unit can be properly discharged by drainage pipe . Installation method:set the drain connection in 25 hole of the chassis has been installed and then connect drainage pipe with drain nozzle,so that condensate and defrosting waer can be properly discharged



Testing and post-installation verification

Check After Installing

Items to be checked	Possible malfunction
Is the unit firmly attached	The unit may fall, shake or make noise.
Has the refrigerant been tested for leakage	It may cause insufficient cooling(heating).
Is the heat insulation sufficient?	It may cause condensation and dripping.
Does the water drain well?	It may cause condensation and dripping.
Is the voltage in accordance with the rated voltage marked on the nameplate?	It may cause and electrical malfunction or damage the part.
Are the electrical wiring and piping connections installed correctly and securely?	It may cause and electrical malfunction or damage the part.
Has the unit been connected to a secure ground connection?	It may cause electrical leakage.
Is the power cord specified?	It may cause an electric malfunction or damage the part
Have the inlet and outlet been covered?	It may cause insufficient cooling (heating)
Have the length of the connection pipes and refrigerant capacity been recorded?	The refrigerant capacity is not accurate.

Test Operation

1. Before test operation

(1) Do not switch on power before installation is entirely complete.
(2) The electric wiring must be connected correctly and securely.
(3) The cut-off valves on the connection pipes should be opened.
(4) All the impurities such as scraps and thrums must be cleared from the unit.

2. Test operation method

(1) Switch on power, press the " ⏻ " button on the wireless remote control to start the unit.
(2) Press the MODE button and select COOL, HEAT, then FAN to check that they run correctly.

Installing and maintaining a healthy filter

Installation Instructions

1. Pull the front panel from the two ends in the direction indicated by the arrows. Then pull the air filter downwards to remove it. (See Fig.a)

2. Mount the healthy filter onto the air filter,(as shown in Fig.b). If the air filter cannot be in- stalled, please mount the healthy filter on the front case. (A shown in Fig.c).

3. Mount the air filter properly along the arrow direction in Fig.d, and then close the panel cover.

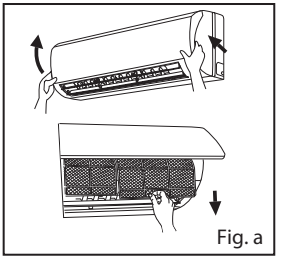


Fig. a

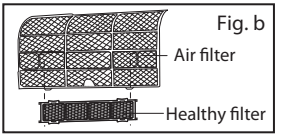


Fig. b

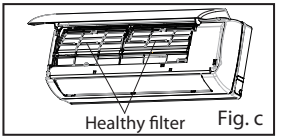


Fig. c

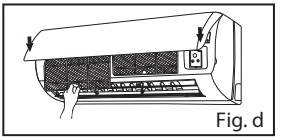


Fig. d

Cleaning and Maintenance

Remove the healthy filter before cleaning and reinstall it after cleaning according to the installation instructions. Note that silver ion filters cannot be cleaned with water, while active carbon, photocatalyst, low-temperature conversion (LTC) catalyst, formaldehyde eliminator, ca- techin or mite killing filters can, but do not brush or rub with hard objects. Dry it in the shade or sun after cleaning, but do not wipe dry

Service Life

The healthy filter is usually effective for one year under normal condition as for silver ion filters are no longer effective when the surface becomes black (green).

- This supplementary instruction is provided as reference for the unit with healthy filter. If the graphics provided herein are different from the physical goods, the latter shall prevail. The quantity of healthy filters shall be based on the actual delivery.