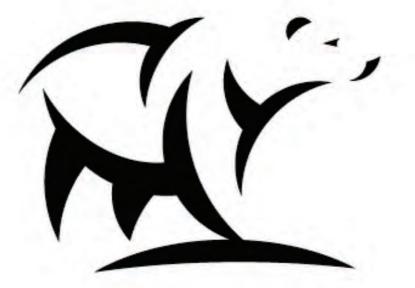
Please read this manual carefully before installation and keep it for future reference.

Installation Manual





Oasis Hyper Heat Series

Please keep this manual where the operator can easily find it. Inside you will find helpful hints on how to use and maintain your unit properly.

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9K & 12K INSTALLATION

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18K & 24K INSTALLATION

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PRECAUTIONS

Installation Precautions

Please read this installation manual carefully before operating the unit, to ensure correct installation.
If the power cord is damaged, replacement work must be performed by authorised personnel only.
Installation must be performed in accordance with the requirement of NEC and CEC by authorized personnel only.

•Contact an authorized service technician for repair, maintenance and installation of this unit.

•This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by persons responsible for their safety.

•Children should be supervised to ensure that they do not play with the appliance.

•All the pictures in the instructions are for explanation purposes only. Actual shape may vary.

•The design and specifications are subject to change without prior notice for product improvement. Consult with the sales agency or manufacturer for more details.

Safety Precautions

Please read these safety precautions carefully before installation.Be sure to follow all the precautions below, they are all important for ensuring safety.

	This symbol indicates the possibility of death or serious injury.
	This symbol indicates the possibility of injury or damage to property.
 Install according to these shock, or fire. 	installation instructions. If installation is defective, it will cause water leakage, electrical
	pries parts specified parts for installation. If you do not this will cause the set to fall, water r fire.
3) Install at a strong and sta done, the set will drop and	able location which is able to withstand the sets weight. If not or installation is not properly
4) For electrical work, follow	v the local national wiring standard, regulation and this installation instructions. An ngle outlet must be used. If electrical circuit capacity is not enough or defect found in electrica
5) Use the specified cable a	nd connect tightly and clamp the cable so that no external force will be acted on the terminal. of correct, it will cause heat-up or fire at the connection.
6) Wiring routing must be p	roperly arranged so that control board cover is fixed properly. If control board cover is not eat at the connection point of terminal, fire or electrical shock.
7) When carrying out piping	g connection, take care not to let gaseous substances other than the specified refrigerant go ling to do this will cause lower capacity, abnormal high pressure in the refrigeration cycle,
8) Do not modify the length	of the power supply cord or use an extension cord, and do not share the single outlet with or, it will cause fire or electrical shock.
other electrical appliances	
grounding is not performe	
2) Do not install the unit ne	ar flammable gas.
3) Carry out drainage piping may enter the room and da	g as mentioned in these installation instructions. If drainage is not performed correctly, water



Indoor Unit

•Choosen location must be able to bear the weight of the unit.

•Choosen location must NOT be near a direct source of heat, such as direct sunlight or any heating appliance.

•Choosen location must provide appropriate clearances as shown in the figure below.

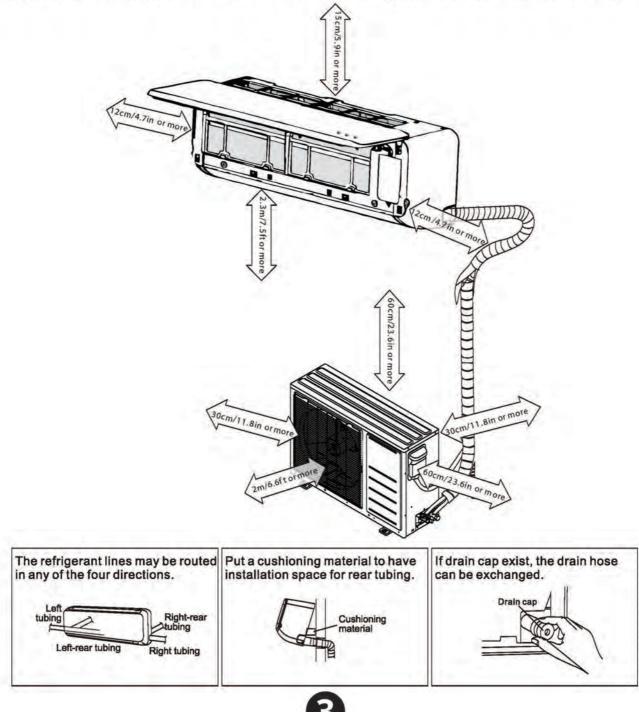
Outdoor Unit

•Choosen location should not be exposed to strong winds. If the unit is exposed to strong winds it is recommended that a wind baffle be used.

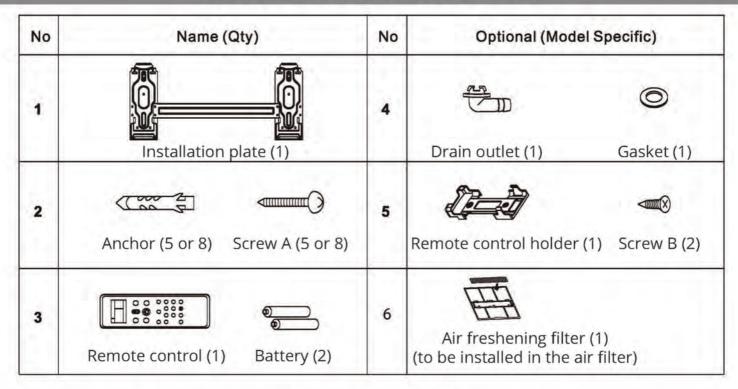
•Choosen location must be able to bear the weight of the unit and hold the unit level.

•Choosen location must provide appropriate clearances as shown in the figure below.

Do not install the indoor or outdoor units in a location with special environmental conditions.



9K & 12K Installation - ACCESSORIES

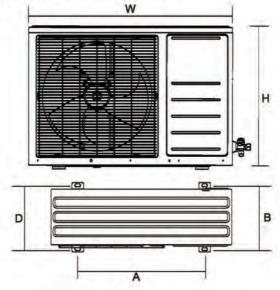


9K & 12K Installation - OUTDOOR MOUNTING DIMENSIONS

NOTE:

•The mounting dimensions may vary, depending on model.

•The fixing bolt head diameter should be more than 10mm.

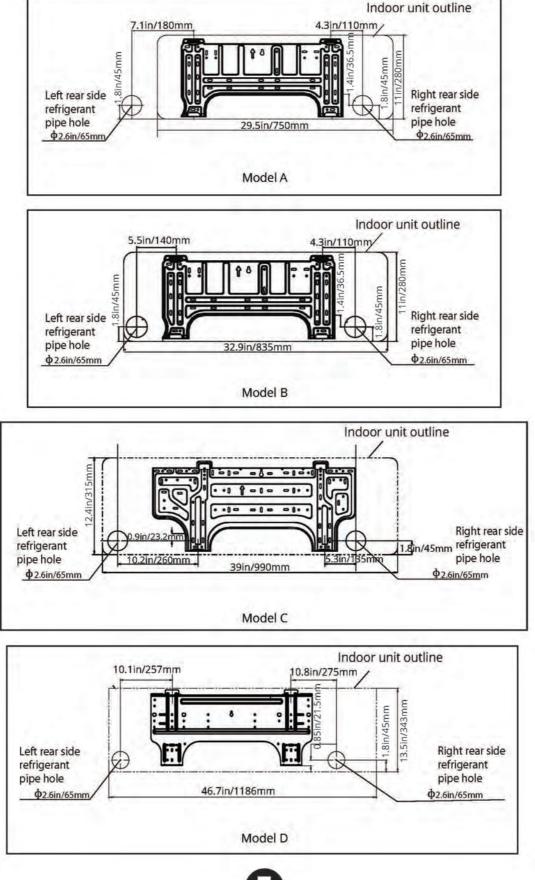


Outdoor unit dimension	Mounting d	imensions
in/mm (WxHxD)	A(in/mm)	B(in/mm)
9.5x21.3x9.4 (700x540x240)	18 (458)	9.8 (250)
30.7x21.3x9.8 (780x540x250)	21.6 (549)	10.9 (276)
29.9x23.2x11.2 (760x590x285)	20.9 (530)	11.4 (290)
31.8x21.9x12.2 (810x558x310)	21.6 (549)	12.8 (325)
33.3x27.6x12.6 (845x700x320)	22.1 (560)	13.2 (335)
35.4x33.9x12.4 (900x860x315)	23.2 (590)	13.1 (333)
37.2x31.9x15.6 (945x810x395)	25.2 (640)	15.9 (405)



NOTE:

•The mounting plate will look like one of the diagrams below dependinf on unit size. •The holes for fixing anchors should be 0.2in/5mm.



6

9K & 12K Installation - PIPING

Connective pipe length will affect the capacity and energy efficciency of the unit. The nominal efficiency is tested with a pipe length of 16.4 feet (5 meters).

	Minimum length		Additional cha	arge per meter
	to reduce abnormal vibration & noise	Charge less length	Liquid side: \$ 1/4in/6.35mm	Liquid side:
R22		The last	1.06oz (30g)	2.12oz (60g)
R410A*	9.8ft(3m)	16.4ft(5m)	0.53oz (15g) (For Inverters)	1.06oz (30g) (For Inverters)
			0.71oz (20g)	1.41oz (40g)

*Please use tools for R410A system.

Align the center to tighten the flare nut and finish connection using two wrenches. Tightening torque for flaring connection is as below.

- C - Flare nut	Outer diam.	Tightening torque (lbf.in/N.cm)	Additional tightening torque(lbf.in/N.cm)
	Ф1/4in (6.35mm)	132.8 (1500)	141.59 (1600)
Wrench D CA Torque	Φ 3/8in (9.52mm)	221.34 (2500)	230.02 (2600)
Wrench Wrench	Φ 1/2in (12.7mm)	309.73 (3500)	318.56 (3600)
	Φ 5/8in (15.88mm)	398.23 (4500)	415.93 (4700)

9K & 12K Installation - WIRING

•A main switch and circuit breaker or fuse must be installed, the capacity should be above 1.5 times of the maximum current in the circuit.

•An individual branch circuit and single socket must be available for use solely for this appliance.

•The indoor power cord should be type H05VV-F or H05V2V2-F.

•The outdoor power cord and interconnecting cable should be type H07RN-F.

•Wire size depends on the rated current which is indicated on the nameplate.

Suggested Minimum Wire Size (AWG: American Wire Gage):

Appliance Amps	AWG Wire Size
10	18
13	16
18	14
25	12
30	10

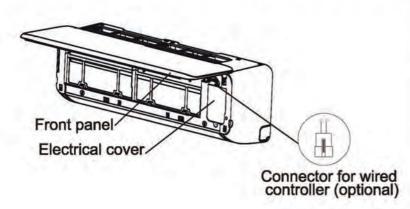


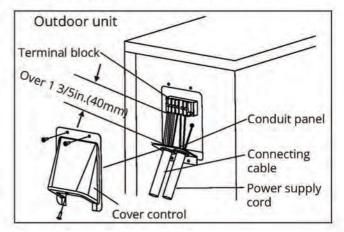
Indoor Wire Connection

- 1) Lift the front panel of the indoor unit.
- 2) Remove the electrical cover and cord clamp, from the indoor unit, by loosening the screws.
- 3) Take the wires from the back of the indoor unit and connect them to the indoor terminal block.

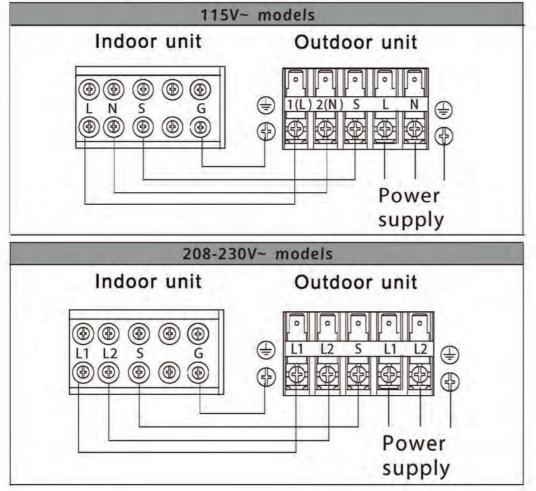
Outdoor Wire Connection

- 1) Remove the electrical cover and cord clamp, from the outdoor unit, by loosening the screws.
- 2) Connect the wires to the outdoor terminal block in the same sequence as in the indoor unit.



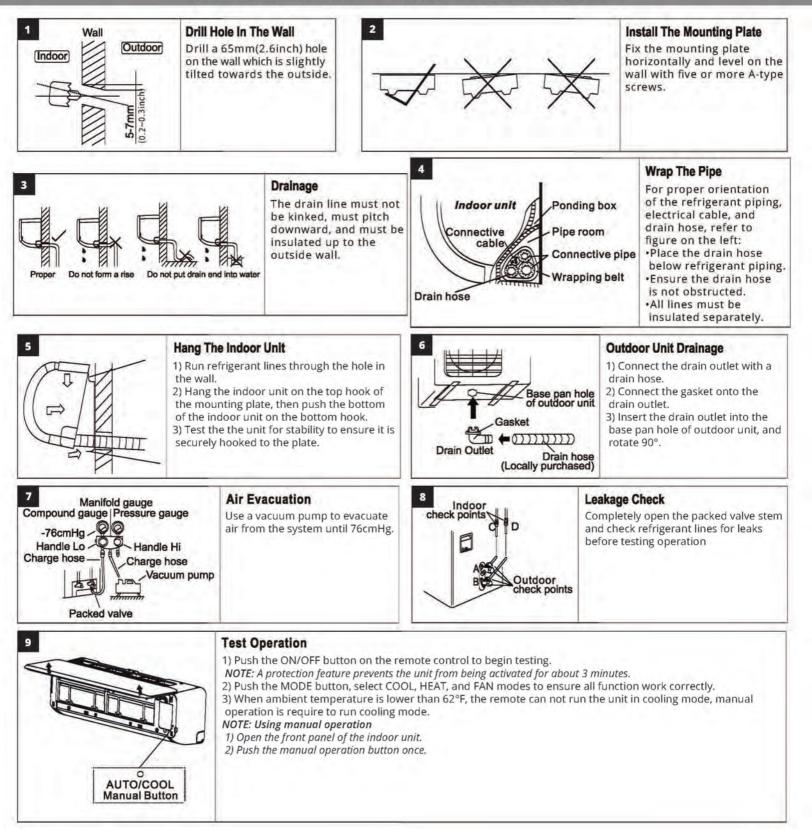


Connection Diagrams





9K & 12K Installation - INSTALLATION PROCESS





Indoor Unit

•Choosen location must be able to bear the weight of the unit.

•Choosen location must NOT be near a direct source of heat, such as direct sunlight or any heating appliance.

•Choosen location must provide appropriate clearances as shown in the figure below.

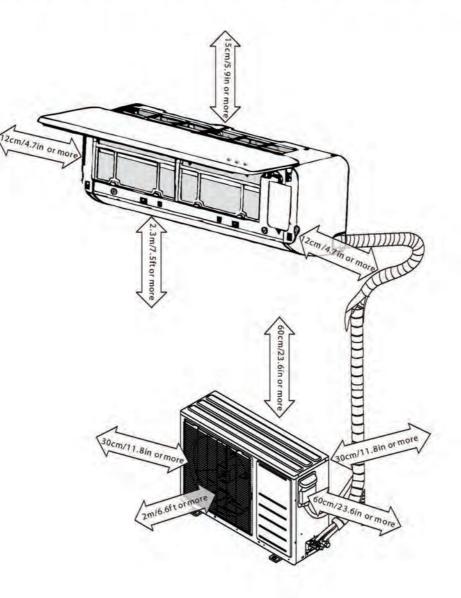
Outdoor Unit

•Choosen location should not be exposed to strong winds. If the unit is exposed to strong winds it is recommended that a wind baffle be used.

•Choosen location must be able to bear the weight of the unit and hold the unit level.

•Choosen location must provide appropriate clearances as shown in the figure below.

Do not install the indoor or outdoor units in a location with special environmental conditions.

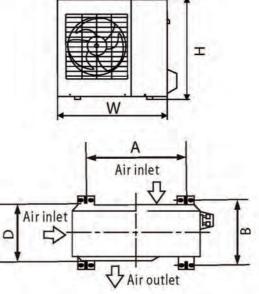




Mounting the Outdoor Unit

Anchor the outdoor unit with a bolt and nut Φ 10 or Φ 8 tightly and horizontally on a condenser pad. **NOTE:** The outdoor unit you purchase may be like one of the following. Install the outdoor unit according to the dimension as indicated in the table below:

Outdoor unit dimension	Mounting dimension		
mm (WxHxD)	A(mm)	B(mm)	
670x540x265	481	276	
780x540x250	549	276	
760x590x285	530	290	
845x700x320	560	335	
810x558x310	549	325	
900x860x315	590	333	



Accessories

Number	Name of Acc	essories			Qty
1	Installation F	late			1
2	Clip Anchor				5-8(depending on models)
3	Self-tapping	Screw A ST3.9x2	25		5-8(dependingon models)
4	Seal (For coo	ling & heating	g models only)		1
5	Drain Joint (I	For cooling & h	heating	models only)	1
1.1			Φ6.	35	
	Connecting pipe Assembly	Liquid side	Φ9.52		Parts you must purchase. The pipe
6		1.1	Φ9.	52	 size differ from appliance to appliance Consult the technician for the proper
	2.2.2.2.000.04	Gas side	Φ12	2.7	size.
-			Φ16		
7	Remote cont	rol	1223		1
8	Self-tapping	Screw B ST2.9x	10	optional	2
9	Remote cont	rol holder	_	parts	1
10	Air freshenin	g filter(used to	o instal	l on Air filter)	1

NOTE: Except the above parts provided, the other parts needed during installation you must purchase.



18K & 24K Installation - INDOOR INSTALLATION

NOTE:

Ensure you mount the indoor unit on a wall that is sturdy enough to hold the weight and minimize vibration.

Mounting Indoor Unit

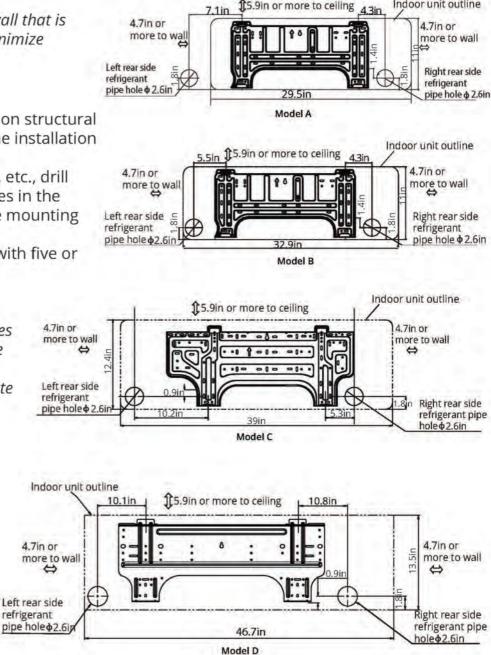
1) Fit the installation plate horizontally on structural parts of the wall withspaces around the installation plate.

If the wall is made of brick, concrete, etc., drill five or eight 0.2in (5mm) diameter holes in the wall. Insert clip anchor for appropriate mounting screws.

3) Fit the installation plate on the wall with five or eight type A screws.

NOTE:

Mount the Installation Plate and drill holes in the wall according to the wall structure and corresponding mounting points on the installation plate. The installation plate provided will differ from appliance to appliance. (Dimensions are in inches unless otherwise stated.)



Indoor unit outline

Dill a Hole in the Wall

х

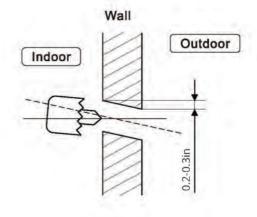
Correct orientation of Installation Plate

1) Determine hole positions according to left and right side of the installation plate. The hole center is obtained by measuring the distance as shown in the diagram above.

2) Drill the piping plate hole with 2.6in (65mm) hole-core drill.

3) Drill the piping hole at either the right or the left and the hole should be slightly slanted to the outdoor side.

Always take steps to protect the pipe when drilling metal grid, metal plate, etc.





Indoor Electrical Connections

Electric safety regulations for the initial Installation

1. If the power supply is damaged or malfunctioning, the technician should refuse to install the unit and explain the issue to the customer.

2. Power voltage should be in the range of 90%~110% of rated voltage.

3. A surge protector and main power switch, with 1.5 times capacity of Max. Current of the unit, should be installed in power circuit. Ensure the air conditioner is grounded properly.

4. The appliance must be installed in accordance with national wiring regulations. Do not operate your air conditioner in a wet room such as a bathroom or laundry room.

5. In accordance with applicable wiring rules, an all-pole disconnection device must be incorporated in the fixed wiring and should have at least 0.12in (3mm) clearances in all poles, have a leakage current that may exceed 10mA, and the residual current device (RCD) having a rated residual operating current not exceeding 30mA.

6. For units with an auxiliary electric heater, keep at least 3 1/2 feet away from any combustibles.

7. Follow the attached Electrical Connection Diagram located on the panel of the indoor and outdoor unit to connect the wiring.

8. All wiring must comply with local and national electrical codes, and be installed by qualified and skilled electricians.

9. An individual branch circuit and single receptacle used only for this air conditioner must be available. See the following table for suggested wire sizes and fuse specifications:

Appliance Amps	AWG Wire Size
10	18
13	16
18	14
25	12
30	10
40	8

Suggested Minimum Wire Size (AWG: American Wire Gauge):

NOTE:

The wire size of power supply cord and interconnected wire and the current of the fuse or switch are determined by the maximum current indicated on the nameplate which located on the side panel of the unit. Please refer to the nameplate before selecting the wire size, fuse or switch.
The controller of the air conditioner is designed with a fuse protection function under abnormal conditions, the specifications of the fuse are printed on the circuit board, such as: T3.15A/250VAC, T5A/250VAC, etc.

NOTE: Before performing any electrical work, turn off the main power to the system.

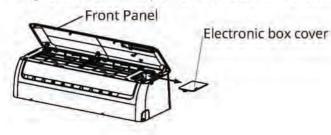
1) The inside and outside connecting cable can be connected without removing the front grille.

2) The indoor power cord type is H05VV-F or H05V2V2-F, the outdoor power cord and interconnected cord type is H07RN-F.

3) Lift the indoor unit panel up, remove the electrical box cover by loosening the screw.

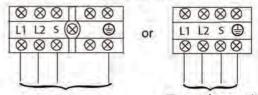
4) Ensure the color of wires of outdoor unit and the terminal Nos. are the same to the indoor's respectively.

5) Wrap those cables not connected with terminals with insulation tapes, so that they will not touch any electrical components. Secure the cable onto the control board with the cord clamp.





Terminal block of indoor unit

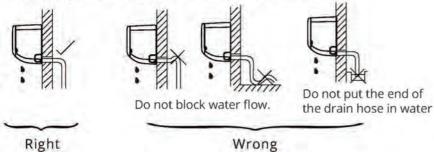


To outdoor unit

To outdoor unit

Drainage

Run the drain hose sloping downward. Do not install the drain hose as illustrated in wrong figures.
 When connecting extension drain hose, insulate the connecting part of extension drain hose with a shield pipe, do not let the drain hose slack.



Connective Pipe Installation

1) For the left-hand and right-hand piping, remove the pipe cover from the side panel.

2) For the right back and left back piping, install the piping as shown.

NOTE: For 9K/12K models, there is only one side drainage structure design. For 18k model, one side drainage structure is standard. Both sides drainage structure is optional and can only be customized from factory. For both sides drainage structure, it can be choosen for right, left or both sides drainage connection. If choosing both sides drainage connection, another proper drain hose is needed as there is only one drain hose offered by factory. If choosing one side drainage connection, make sure the drain hole on the other side is well plugged. The connection of the drain hose is supposed to be done by qualified installer to avoid water leakage.

3) Bundle the tubing, connecting cable, and drain hose with tape securely, evenly as shown in Figure on the right.

•Because the condensed water from rear of the indoor unit is gathered in ponding box and is piped out of the room. Do not put anything else in the box.

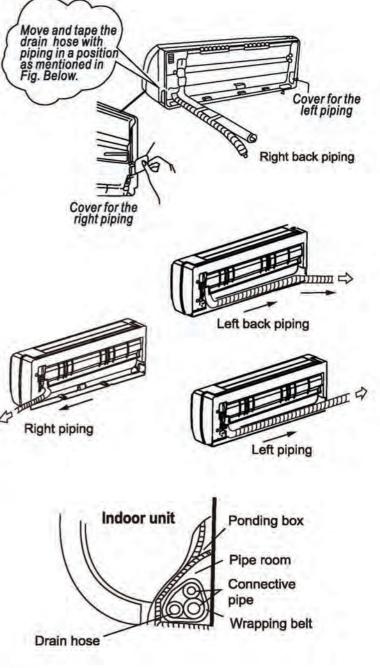
CAUTION:

Connect the indoor unit first, then the outdoor unit.
Do not allow the piping to let out from the back of the indoor unit.

•Be careful not to let the drain hose slack.

•*Heat insulation should be used on the extension drain hose of the indoor unit.*

Be sure that the drain hose is located at the lowest side of the bundle. Locating at the upper side can cause the drain pan to overflow inside the unit.
Never intercross nor intertwist the power wire with any other wiring.





18K & 24K Installation - INDOOR INSTALLATION

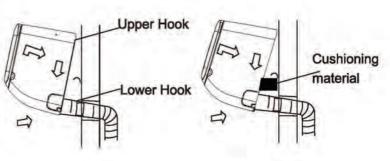
Indoor Unit Installation

with the their slots.

1) Pass the piping through the hole in the wall.

2) Hook the indoor unit onto the upper portion of installation plate(Engage the indoor unit with the upper edge of the installation plate). Ensure the hooks are properly seated on the installation plate by moving it in left and right.

3) Piping can easily be made by lifting the indoor unit with a cushioning material between the indoor unit and the wall. Get it out after finish piping.4) Press the lower left and right side of the unit against the installation plate until hooks engages



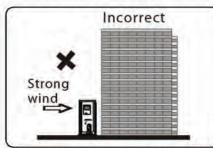
18K & 24K Installation - OUTDOOR INSTALLATION

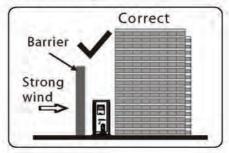
•Install the outdoor unit on a rigid base to prevent increasing noise levels and vibration.

•Determine the air outlet direction where the discharged air is not blocked.

In the case that the installation place is exposed to strong wind such as a seaside, make sure the fan is operating properly by putting the unit lengthwise along the wall or using a dust or shield plates.
Specially in windy areas, install the unit to prevent the admission of wind. If suspended installation is needed, the installation bracket should coincide with technique requirement in the installation bracket diagram. The installation wall should be solid brick, concrete or of similar construction, or actions to reinforce should be taken.

•The connection between bracket and wall, bracket and the unit should be firm, stable and reliable. •Be sure there is no obstacle which block radiating air.



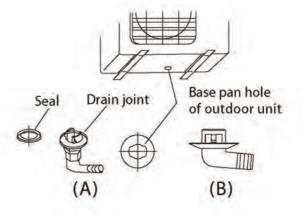


Drain Joint Installation

NOTE: The drain joint is slightly different according to the different outdoor unit.

For the drain joint with the seal(Fig.A), first fit the seal onto the drain joint, then insert the drain joint into the base pan hole of outdoor unit, rotate 90° to securely assemble them.

To install drain joint as shown in Fig.B, insert the drain joint into the base pan hole of outdoor unit until it remains fixed with a clicking sound. Connecting the drain joint with an extension drain hose (Locally purchased), in case of the water draining off the outdoor unit during the heating mode.





Connecting Refrigerant Piping Flaring

1) Cut a pipe with a pipe cutter.

2) Put flare nuts on pipe/tube having completed

burr removal and flare the pipe.

3) Firmly hold copper pipe in a die in the dimension shown in the table below.

Outer diam.	A(mm)		
(mm)	Max.	Min.	
φ 6.35	1.3	0.7	
ф 9.52	1.6	1.0	
ф 12.7	1.8	1.0	
φ16	2.2	2.0	

Tightening Connections

•Align pipes to be connected.

•Sufficiently tighten the flare nut with fingers, and then tighten it with a spanner and torque wrench as shown.

•Excessive torque can break nut depending on installation conditions.

Outdoor Electrical Connections

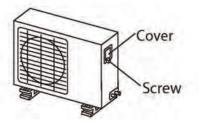
1) Remove the electrical control board cover from the outdoor unit by loosening the screw.

2) Connect the connective cables to the terminals as identified with their respective matched numbers on the terminal block of indoor and outdoor units.

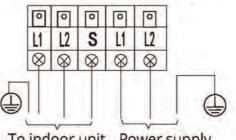
3) Secure the cable onto the control board with the cord clamp.

4) To prevent the ingress of water, form a loop of the connective cable as illustrated in the installation diagram of indoor and outdoor units.

5) Insulate unused cords (conductors) with PVC-tape. Process them so they do not touch any electrical or metal parts.

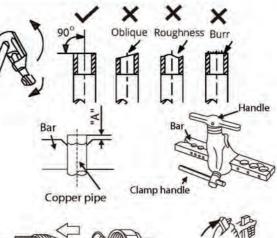


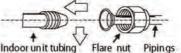
Terminal block of outdoor unit



To indoor unit Power supply







Outer	Tightening	Additional tightening	
diam.	torque(N.cm)	torque(N.cm)	
ф 6.35mm	1500 (153kgf.cm)	1600 (163kgf.cm)	
⊉ 9.52mm 2500		2600	
(255kgf.cm)		(265kgf.cm)	
ф12.7mm	3500 (357kgf.cm)	3600 (367kgf.cm)	
ф16mm 4500		4700	
(459kgf.cm)		(479kgf.cm)	

NOTE: Connective pipe length will affect the capacity and energy efficiency of the unit. The nominal efficiency is tested basing on the pipe length of 24.6 feet.

Air Purging

•The indoor unit and tubing between the indoor and outdoor unit must be leak tested and evacuated to remove any noncondensables and moisture from the system.

•Check that each tube (both liquid and gas side tubes) between the indoor and outdoor units have been properly connected and all wiring for the test run has been completed.

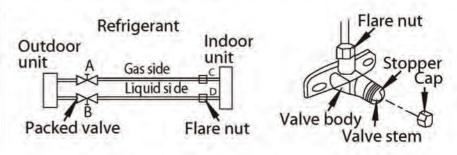
•Pipe length and refrigerant amount:

Connective pipe length	Air purging method	Additional amount of refrigerant to be charged	
Less than 7.5m	Use vacuum pump		÷
More than 7.5m	Use vacuum pump	Liquid side: Φ6.35mm R22: (Pipe length-7.5)x30g/m R410A: (Pipe length-7.5)x15g/m	Liquid side: Φ9.52mm: R22: (Pipe length-7.5)x60g/m R410A: (Pipe length-7.5)x30g/m

•For the R410A refrigerant model, make sure the refrigerant added into the unit is in liquid form. •When relocating the unit, use a vacuum pump to perform evacuation.

CAUTION

Open the valve stem until it hits against the stopper. Do not try to open it further.
Securely tighten the valve stem cap with a spanner wrench.
Valve stem cap tightening torque. See



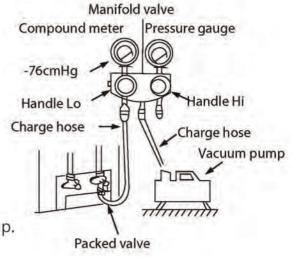
Using the Vacuum Pump

Tightening torque table.

1) Completely tighten the flare nuts, A, B, C, D, connect the manifold valve charge hose to a charge port of the packed valve on the gas pipe side.

- 2) Connect the charge hose connection to the vacuum pump.
- 3) Fully open the handle Lo of the manifold valve.
- 4) Operate the vacuum pump to evacuate. After starting evacuation, slightly loose the flare nut of the packed valve on the gas pipe side and check that the air is entering. (Operation noise of the vacuum pump changes and a compound meter indicates 0 instead of minus)
 5) After the evacuation is complete, fully close the handle Lo

•Make evacuation for 15 minutes or more and check that the compound meter indicates -76cmHg(-1.0x105Pa).



6) Turn the stem of the packed valve B about 45° counterclockwise for 6~7 seconds after the gas leaves, then tighten the flare nut again. Make sure the pressure display in the pressure indicator is a little higher than the atmosphere pressure.

- 7) Remove the charge hose from the Low pressure charge hose.
- 8) Fully open the packed valve stems B and A.
- 9) Securely tighten the cap of the packed valve.



18K & 24K Installation - OUTDOOR INSTALLATION

Leak Check

1) Soapy water method:

Apply a soap water or a liquid neutral detergent on the indoor unit connections and outdoor unit connections by a soft brush to check for leakage of the connecting points of the piping. If bubbles come out, it indicates that the pipes have leakage. 2) Leak detector method:

Use the leak detector to check for leakage.

CAUTION

A: Lo packed valve B: Hi packed valve C and D are ends of indoor unit connection.

Test Run

Perform test operation after completing gas leak check at the flare nut connections and electrical safety check.

•Check that all tubing and wiring have been properly connected.

•Check that the gas and liquid side service valves are fully open.

1) Connect the power, press the ON/OFF button on the remote controller to turn the unit on.

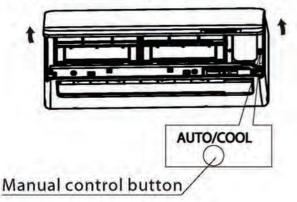
2) Use the MODE button to select COOL, HEAT, AUTO and FAN to check if all the functions works well.

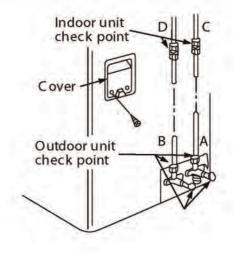
3) When the ambient temperature is too low(lower than 62°F/17°C), the unit cannot be controlled by the remote control to run at cooling mode, manual operation can be taken. Manual operation is used only when the remote control is disable or maintenance necessary.

•Hold the panel sides and lift the panel up to an angle until it remains fixed with a clicking sound.

•Press the Manual control button to select the AUTO or COOL, the unit will operate under Forced AUTO or COOL mode (see User Manual for details).

4) The test operation should last about 30 minutes.









Oasis Hyper Heat Series

The design and specifications are subject to change without prior notice. Consult with the sales agency or manufacturer for details.