



INSTALLATION & USER MANUAL

















Supreme Heating

Our Innovation. Your Lifestyle.

National Support Office

2/19 Enterprise Drive Bundoora VIC 3083 P: (03) 9460 4200 F: (03) 9460 4900 info@supremeheating.com.au supremeheating.com.au

NSW Office

19/24 Anzac Avenue Smeaton Grange NSW 2567 P. (02) 4648 4766 M: 0448 959 666 M: 0438 471 381 solar.nsw@supremeheating.com.au salesnsw@supremeheating.com.au

QLD Office

Unit 13, 53-57 Link Drive Yatala OLD 4207 P: (07) 3807 6308 F: 1300 887 879 M: 0455 064 765 solarqld@supremeheating.com.au

SA Office

Unit 4, 7-9 Streiff Road Wingfield SA 5013 P: 1300 787 978 F: 1300 887 879 M: 0437 947 375 solarsa@supremeheating.com.au

WA Office

South Fremantle WA 6162 P: (08) 9433 5588 solar@supremeheating.com.au









INSTALLATION & USER MANUAL

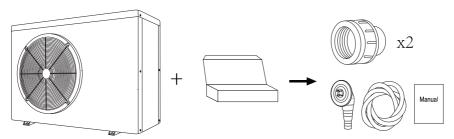
1. General information 02 1.1. Contents 02 1.2. Operating conditions and range 02 1.3. Advantages of different modes 02 1.4. Kind reminder 03 2. Operations 06 2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions			FOR USERS	
1.1. Contents 02 1.2. Operating conditions and range 02 1.3. Advantages of different modes 02 1.4. Kind reminder 03 2. Operations 06 2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26 <td>1</td> <td>6</td> <td></td> <td>00</td>	1	6		00
1.2. Operating conditions and range 02 1.3. Advantages of different modes 02 1.4. Kind reminder 03 2. Operations 06 2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	1.			
1.3. Advantages of different modes 02 1.4. Kind reminder 03 2. Operations 06 2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26				
1.4. Kind reminder 03 2. Operations 06 2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			, ,	
2. Operations 06 2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			9	
2.1. Notice before using 06 2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26				
2.2. Operation instructions 06 2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	2.	- '		
2.3. Daily maintenance and winterizing 08 3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			-	
3. Technical specification 09 FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			·	06
## FOR INSTALLERS AND PROFESSIONALS 4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 **ANCILLARY PRODUCTS** 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			,	08
4. Transportation 10 5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	3.	Techr	·	09
5. Installation and maintenance 11 5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			FOR INSTALLERS AND PROFESSIONALS	
5.1. Notice before installation 11 5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	4.	Trans	sportation	10
5.2. Installation instructions 12 5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	5.	Insta	llation and maintenance	11
5.3. Trial after installation 18 6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26		5.1.	Notice before installation	11
6. Trouble shooting for common faults 20 7. Error codes 21 ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26		5.2.	Installation instructions	12
ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26		5.3.	Trial after installation	18
ANCILLARY PRODUCTS 8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	6.	Trouk	ole shooting for common faults	20
8. VortexSwitch 22 8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	7.	Error	codes	21
8.1. Operation 22 8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26			ANCILLARY PRODUCTS	
8.2. Heating priority 22 8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	8.	Vorte	exSwitch	22
8.3. Installation instructions 23 9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26		8.1.	Operation	22
9. VortexLink 24 9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26		8.2.	Heating priority	22
9.1. Operation 24 9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26		8.3.	Installation instructions	23
9.2. Heat demand 24 9.3. Installation instructions 25 10. Wifi 26	9.	Vorte	exLink	24
9.3. Installation instructions 25 10. Wifi 26		9.1.	Operation	24
10. Wifi 26		9.2.	Heat demand	24
		9.3.	Installation instructions	25
WADDANTY	10.	Wifi		26
WARRANTI			WARRANTY	
11. Warranty agreement 28	11.	Warr	anty agreement	28



1. GENERAL INFORMATION

1.1. CONTENTS:

After unpacking, please check that you have all the following components.



1.2. OPERATING CONDITIONS AND RANGE

ITEMS		RANGE
Operating Range	Air temperature	-7°C - 43°C
Tomore questi una Cattina	Heating	18°C - 40°C
Temperature Setting	Cooling	12°C - 35°C

The heat pump will have ideal performance in the operation range Air 15 $^{\circ}$ C - 25 $^{\circ}$ C

1.3. ADVANTAGES OF DIFFERENT MODES

The heat pump has two modes: Smart and Silence. They have different advantages under different conditions

MODE	RECOMMENDATION	ADVANTAGES
al	Smart mode As standard	Heating capacity: 20% to 100% capacity Intelligent optimisation Fast heating
41	Silence mode	Heating capacity: 20% to 80% capacity
	Use at night	Sound level: 3dB (A) lower than Smart mode.

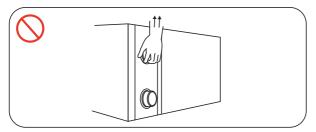


1.4. KIND REMINDER

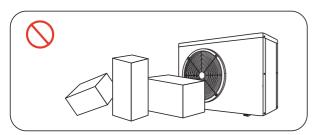


This heat pump has power-off memory function. When the power is recovered, the heat pump will restart automatically.

- 1.4.1. The heat pump can only be used with pool water. It can NEVER be used to heat or cool other flammable or turbid liquid.
- 1.4.2. When moving the heat pump, do not lift the water union. This will damage the titanium heat exchanger.

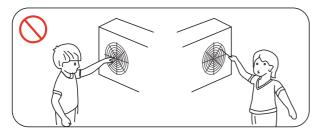


1.4.3. Do not obstruct the air inlet or outlet of the heat pump.

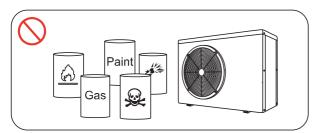




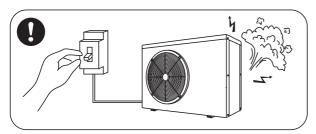
1.4.4. Do not obstruct or insert any objects into inlet or outlet of the heat pump. The efficiency may be reduced or even stopped.



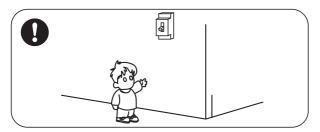
1.4.5. To avoid fire hazards, do not store or use combustible gas or liquids such as thinners, paints or fuels near the heat pump.



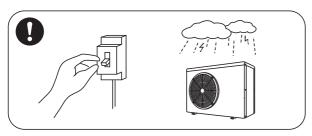
1.4.6. If you detect any abnormal noises, odours, smoke or leaks from the heat pump, immediately switch off the power supply and contact your local dealer. Do not attempt to repair the heat pump yourself.



1.4.7. The main power supply switch should be out of the reach of children.



1.4.8. Please disconnect the heat pump from the power supply during electrical storms.



1.4.9. Please note that following codes are not failures.

	CODES
No water flow	E3
Anti-freezing reminder	Ed
Out of the operating range	Eb
Insufficient water flow or pump blocked	E B
Power abnormal	E 5

2.1. NOTICE BEFORE USING

- To optimise the life-cycle of the system, the user is advised to start the water pump before the heat pump, and turn off the heat pump before the water pump.
- Check for any water leakage in connecting pipework, then turn on the power supply, press the ON/OFF button of the heat pump, and set desired temperature.



2.2. OPERATION INSTRUCTIONS

SYMBOL	DESIGNATION	OPERATION
(1)	Power ON/OFF	Press to power on or off the heat pump
	Up/ Down	Press to set desired water temperature
M	Heat/Cool/Auto	Press to switch between cooling, heating and auto
	Fan	Press to select Silence mode ON/OFF

Note:

- 1. You can set the desired water temperature from 12°C to 40°C.
- 2. The numbers on the right of the display show the inlet water temperature. The numbers on the left of the display show the outlet water temperature.
- 3. Turn on the heat pump and the fan will start to run after 3 minutes. In another 30 seconds, the compressor will start to run.



2.2.1 Status on the display











2.2.2. Clock setting

- 1. Press for 5 seconds to enter the clock setting. 88:88 is flashing on the display
- 2. Press (a) or (b) to adjust the time (fast adjusting by continuous pressing). Then, press (b) to confirm and exit
- 3. If no settings are made within 30 seconds, any changes will be lost and the controller will exit the clock setting.

2.2.3. Timer on and off

- 1. Press the (a) for 10 seconds to enter the timer setting. The "ON" will be flashing to enter the Timer ON setting. Press the (a) or to adjust Timer ON time. You can choose Timer ON (Display: ON), or Repeat Timer ON (Display: 1 ON) by pressing (b). Then press (c) to confirm.
- 2. When the "ON" stops flashing, and "OFF" is flashing, you enter the Timer OFF mode. Press the or to adjust Timer OFF time. You can choose Timer OFF (Display: OFF), or Repeat Timer OFF (Display: 2 OFF) by pressing to confirm.
- 3. After entering the Timer ON/OFF setting, press directly without adjusting the time to cancel the relevant Timer setting.
- 4. If no settings are made within 30 seconds, any changes will be lost and the controller will exit the Timer ON/OFF setting.

2.2.4 Silence mode

- The Smart mode as default will be activated when the machine is turned on. And the display shows 41.
- 2. When machine is on, press button to enter the Silence mode. will be light. Press again to exit.

2.2.5 Compulsory defrost

- When the machine is on heating mode and the compressor is working continuously for 10 minutes, press both (1) and (2) buttons for 5 seconds to start compulsory defrost. (Note: the break between compulsory defrost needs to be more than 30 minutes.)
- 2. The defrost symbol is on when machine is in compulsory defrost mode or auto defrost mode.
- 3. Compulsory defrost will take the same amount of time as auto defrost.



2.3. DAILY MAINTENANCE AND WINTERIZING

2.3.1. Daily Maintenance

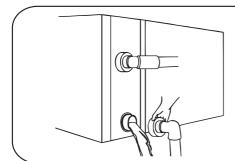


Please don't forget to cut off power supply to the heat pump

- Please clean the evaporator with household detergents or clean water. NEVER use gasoline, thinners or any similar fuel.
- 2. Check bolts, cables and connections regularly.

2.3.2. Winterizing - Sub-Zero Climates

In climates where the winter season reaches sub-zero temperatures, please disconnect from power supply and drain water out of the heat pump. When using the heat pump under 2°C, make sure there is always water flow.



Unscrew the water union of inlet pipe to let the water flow out.

When the water in machine freezes in winter season, the titanium heat exchanger may be damaged.



3. TECHNICAL SPECIFICATION

SPECIFICATIONS							THREE PHASE
MODEL		10 KW	13 KW	17 KW	21 KW	28 KW	35 KW
Mode Type				He	eat & Cool		
Discharge					Side		
Fan Quantity					1		
Performance at Air 2	26°C, Wa	ter 26°C, Humid	lity 80%				
Heat Capacity	kW	9.8	13.3	17.3	21	27.3	35.2
COP		6.9-15.3	6.4-15.4	5.9-15.5	5.7-15.2	6.2-15.3	5.5-15.5
Performance at Air 1	5°C, Wat	er 26°C, Humidi	ty 70%				
Heat Capacity	kW	6.8	9.4	11.4	14.3	18	24
COP		4.6-7.7	4.4-7.8	4.3-7.8	4.2-7.7	4.6-8.1	4.5-8.0
General							
Rated input power at air 15°C	kW	0.21-1.4	0.27-2.1	0.3-2.6	0.36-3.3	0.53-3.8	0.63-5.15
Rated input current at air 15°C	Amps	0.91-6.1	1.17-9.1	1.3-11.3	1.57-14.3	2.3-16.5	0.91-7.4
Circuit Breaker	Amps	10	15	20	25	25	15
Power Supply			2	240v / 50Hz / 1P	PH		380v / 50Hz / 3PH
Wiring		Pre-wired for 10 amp plug			Must be hard w	ired	
Pool Volume - Cold Climate	Litres	≤20,000	≤30,000	≤40,000	≤50,000	≤60,000	≤80,000
Pool Volume - Warm Climate	Litres	≤30,000	≤40,000	≤50,000	≤60,000	≤70,000	≤100,000
Advised Flow Rate	L/min	60	100	125	150	180	230
Inlet / Outlet	mm				50		
Compressor				Twin-rotary M	1itsubishi DC inve	erter	
Heat Exchanger				Spiral tita	nium tube in PV0		
Casing				В	lack ABS		
Noise Level (1m)	dBA	38.6-49.9	41.3-54.0	43.1-53.8	40.9-54.2	43.5-54.9	42.6-54.7
Refrigerant					R410A		
Weight / Dimensions							
Net Weight	kg	49	52	63	68	90	117
Net Dimensions LxWxH	mm	961 x 340 x 658	961 x 340 x 658	961 x 420 x 658	961 x 420 x 758	1092 x 420 x 958	1161 x 530 x 958

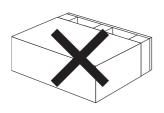
The sizing of heat pumps are based on pool volume for seasonal swimming with the use of a Heatseeker Diamond Pool Cover.

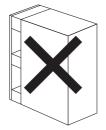
- 1. The values indicated are valid under ideal conditions: Pool covered with an isothermal cover.
- 2. Related parameters are subject to adjustment periodically for technical improvement without further notice. For details please refer to nameplate.

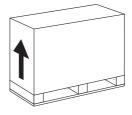


4. TRANSPORTATION

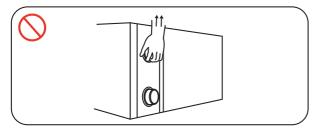
4.1. When storing or moving the heat pump, please ensure the unit remains in an upright position at all times.







4.2. When moving the heat pump, do not lift the water union. This will damage the titanium heat exchanger.



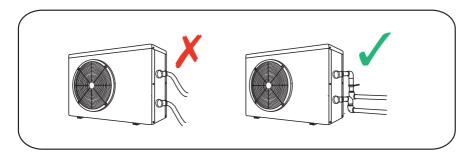
5. INSTALLATION AND MAINTENANCE



It is strongly advised that the heat pump is installed by a professional. Unqualified installations may result in damage to the heat pump and/or safety risks to the user.

5.1. NOTICE BEFORE INSTALLATION

5.1.1. Plumbing connections must be made with solid PVC pipe. Usage of flexible PVC pipe is not recommended.





5.2. INSTALLATION INSTRUCTIONS

5.2.1. Location and size

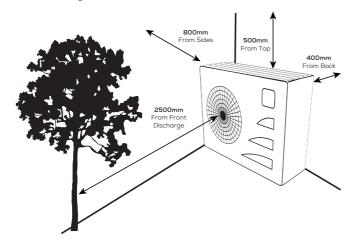


The heat pump should be installed in a place with good ventilation.

The heat pump is usually installed within a perimeter area extending 7.5m from the swimming pool. The greater the distance from the pool, the greater the heat loss in the pipes. As the pipes are mostly underground, the heat loss is low for distances up to 30m (15m from and to the heat pump; 30m in total) unless the ground is wet or the groundwater level is high. A rough estimate of the heat loss per 30m is 0.6 kWh (2,000 BTU) for every 5°C difference between the water temperature in the pool and the temperature of the soil surrounding the pipe. This increases the operating time by 3% to 5%.

Do not obstruct the air inlet or outlet of the heat pump. The efficiency may be reduced or even stopped.

Side Discharge





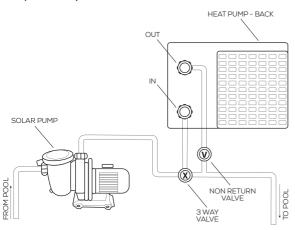
Check Valve Installation



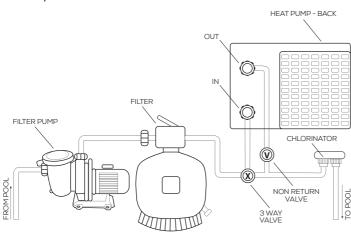
Automatic Dosing

Sanitation and automatic dosing systems must be plumbed after the heat pump. A check valve must be installed between the sanitation/automatic dosing system and the heat pump to prevent chemicals returning to the heat pump. Failure to observe this instruction will void the warranty.

Independent System

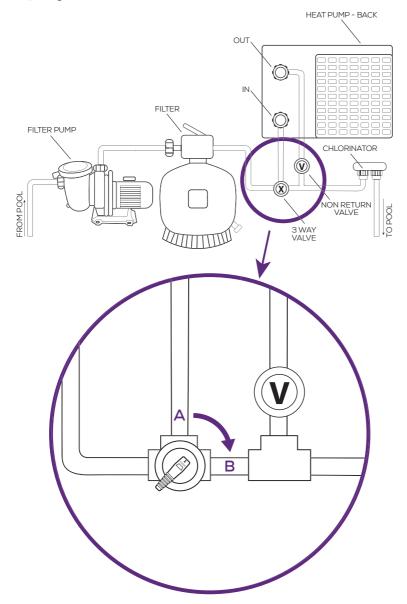


In-line System





Adjusting the Bypass





Use the following procedure to adjust the bypass:

- 1. Close the valve to **Position A**
- 2. Turn on the circulation pump

sequence will now begin.

Slowly open the valve towards Position B until the display error code of "E6" disappears.
 Once the message clears, the default display is the current water temperature. Starting

Optimal operation and water flow through the heat pump occurs when the cooling gas pressure is 22 ± 2 bar.

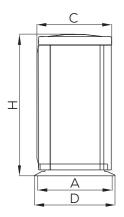
This pressure can be read on the pressure gauge next to the heat pump control panel.

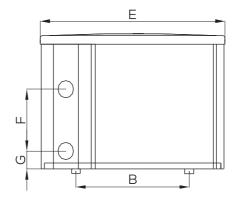


Bypass Installation

Operation without a bypass or with improper bypass adjustment may result in suboptimal heat pump operation and possible damage to the heat pump. Failure to observe this instruction will void the warranty.







NAME SIZE (MM) MODEL	А	В	С	D	E	F	G	н
10 kW	315	590	312	340	961	280	74	658
13 kW	315	590	312	340	961	340	74	658
17 kW	395	590	392	420	961	390	74	658
21 kW	395	590	392	420	961	460	74	758
28 kW	395	720	392	420	1092	620	74	958
35 kW (Three Phase)	505	790	496	530	1161	650	74	958

Above data is subject to modification without notice.

5.2.2. Heat pump installation

1. When the heat pump is running, condensation will occur and drain from the bottom of the unit. This is completely normal. However, consideration should be made for how to drain the condensation away. Drainage nozzle and pipe are supplied.



5.2.3. Wiring & protecting devices and cable specification

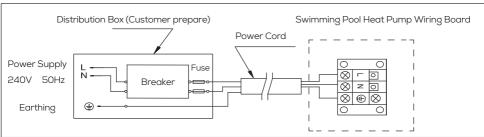
- Connect to appropriate power supply. The voltage should comply with the rated voltage of the unit.
- 2. Earth the machine well.
- 3. Wiring must be handled by a professional technician according to the circuit diagram.
- 4. Set leakage protector according to the local code for wiring (leakage operating current < 30mA).
- 5. The layout of power cable and signal cable should be orderly and not affect each other.



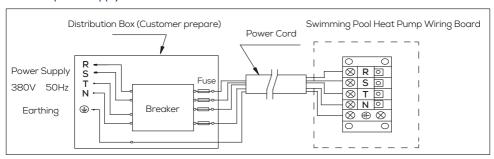
Switch on after finishing all wiring construction and re-checking.

Wiring Diagram

A. For power supply: 240V 50Hz



B. For power supply: 380V 50Hz





For the detailed wiring diagram, please refer to Appendix 1.



2. Options for protecting devices and cable specification

	MODEL	10 KW	13 KW	17 KW	21 KW	28 KW	35 KW
	MODEL		SI		THREE PHASE		
Breaker	Minimum Rated Current A	15.0	15.0	20.0	25.0	25.0	15.0
	Rated Residual Action Current mA	30	30	30	30	30	30
Fuse A		15.0	15.0	20.0	25.0	25.0	15.0
Power Cord (mm²)		3×2.5	3×2.5	3×2.5	3×4	3×6	5×2.5
Signal ca	ble (mm²)	3×0.5	3×0.5	3×0.5	3×0.5	3×0.5	3×0.5

NOTE: The above data is adapted to power cord ≤ 10 m . If power cord is ≥ 10 m, wire diameter must be increased. The signal cable can be extended to 50m at most.

5.3. TRIAL AFTER INSTALLATION



Please check all the wirings carefully before turning on the heat pump.

5.3.1 Inspection before use

- Check installation of the whole heat pump and the pipe connections according to the pipe connecting drawing;
- 2. Check the electric wiring according to the electrical wiring diagram and earthing connection;
- 3. Make sure that the main power is well connected;
- 4. Check if there is any obstacle in front of the air inlet and outlet of the heat pump



5.3.2. Trial

- 1. The user is advised to start the water pump before the heat pump, and turn off the heat pump before the water pump for long life circle.
- 2. The user should start the water pump, and check for any leakage of water; power on and press the ON/OFF button of the heat pump, and set desired temperature in the thermostat.
- 3. In order to protect the heat pump, the heat pump is equipped with start delay function. When starting the heat pump, the fan will start to run in 3 minutes, in another 30 seconds, the compressor will start to run.
- 4. After pool heat pump starts up, check for any abnormal noise from the heat pump.
- 5. Check the temperature setting



6. TROUBLE SHOOTING FOR COMMON FAULTS

FAILURE	REASON	SOLUTION			
	No power	Wait until the power recovers			
Heat pump doesn't run	Power switch is off	Switch on the power			
	The breaker is off	Check and turn on the breaker			
For any and the standards	Evaporator blocked	Remove the obstacles			
Fan running but with insufficient heating	Air outlet blocked	Remove the obstacles			
insufficient neating	3 minutes start delay	Wait patiently			
Display respond by the beating	Set temp. too low	Set proper heating temp.			
Display normal, but no heating	3 minutes start delay	Wait patiently			
If above solutions don't work, please contact your installer with detailed information and your model number.					
Don't try to repair it yourself.					



Please don't try to repair the heat pump by yourself to avoid any risk.



7. ERROR CODES

NO.	DISPLAY	NOT FAILURE DESCRIPTION
1	E3	No water protection
2	E5	Power supply excesses operation range
3	E6	Excessive temp difference between inlet and outlet water (Insufficient water flow protection)
4	Eb	Ambient temperature too high or too low protection
5	Ed	Anti-freezing reminder
NO.	DISPLAY	FAILURE DESCRIPTION
1	E1	High pressure protection
2	E2	Low pressure protection
3	E4	3 phase sequence protection (three phase only)
4	E7	Water outlet temp too high or too low protection
5	E8	High exhaust temp protection
6	EA	Evaporator overheat protection (only at cooling mode)
7	PO	Controller communication failure
8	P1	Water inlet temp sensor failure
9	P2	Water outlet temp sensor failure
10	P3	Gas exhaust temp sensor failure
11	P4	Evaporator coil pipe temp sensor failure
12	P5	Gas return temp sensor failure
13	P6	Cooling coil pipe temp sensor failure
14	P7	Ambient temp sensor failure
15	P8	Cooling plate sensor failure
16	P9	Current sensor failure
17	PA	Restart memory failure
18	F1	Compressor drive module failure
19	F2	PFC module failure
20	F3	Compressor start failure
21	F4	Compressor running failure
22	F5	Inverter board over current protection
23	F6	Inverter board overheat protection
24	F7	Current protection
25	F8	Cooling plate overheat protection
26	F9	Fan motor failure
27	Fb	Power filter plate No-power protection
28	FA	PFC module over current protection



8. VORTEX SWITCH

8.1 OPERATION

The VortexSwitch is designed to switch a 240Vac pump maximum rated to 9.98 Amps 2395 watts from the switch inputs. This unit is designed to be plugged into a general power outlet and the heating priority connections on the heat pump.

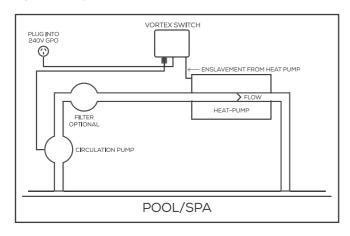
8.2 HEATING PRIORITY

The heat pump is designed to heat or cool the water of the pool only when the water circulates through it. By connecting the VortexSwitch to the heat pump, and then the circulation pump to the VortexSwitch, the heat pump will control when the circulation pump is run. This system allows the heat pump to maintain the set-point temperature in either heating or cooling mode.

Every 60 minutes, the circulation pump is started for 2 minutes to sample the water temperature. If after 2 minutes, the temperature of the water is below/above the required set-point temperature (depending if in heating or cooling mode), the circulation pump will be turned off for a further 60 minutes before sampling the water temperature again.

If the heat pump senses that the water has cooled/heated below/above the temperature setpoint, the circulation pump and the heat pump will continue to operate until the desired set-point temperature is reached.

By following the instructions in the heat pump instruction manual, setting a start and stop time will ensure that the heat pump is not sampling the water temperature and running throughout the night if running noise is a factor.





8.3 INSTALLATION INSTRUCTIONS

8.3.1 Mounting

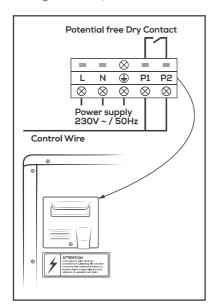
Find a suitable location to mount the VortexSwitch box. Ideally as with all pool equipment it should be installed out of direct weather and no closer than 3m from the water's edge and a minimum of 600mm above ground. Lift up the two mounting tabs and use two appropriate screws to mount the VortexSwitch box to the wall, keeping in mind that the power cable is 1.8m long and should be plugged directly into a general power outlet, not into an extension lead.

8.3.2 Pump

The circulation pump plugs into the 240V outlet beneath the VortexSwitch.

8.3.3 Heating Priority

Connect the heating priority cable from the VortexSwitch to the heat pump, refer to the heat pump manufacturer's instructions and the below diagram for the appropriate connection and note that damage caused by incorrect connections will void warranties.





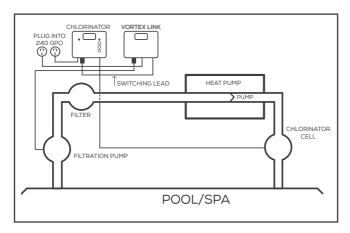
9. VORTEX LINK

9.1 OPERATION

The VortexLink is designed to switch a 240Vac pump rated to 10 Amps 2400 watts from the switch inputs. This unit is designed to be connected to a chlorinator and the outputs from heat pumps. VortexLink is fitted with an LCD screen which displays whether the pump is on and whether the chlorinator or heat pump is demanding the pump to be operating.

92 HEAT DEMAND

A heating device, whatever it is, is designed to heat the pool water only when the water circulates. Most of the time, a pool is filtered between 6 and 8 hours a day. But such a time can't be sufficient sometimes to maintain the water at the desired temperature, depending on the seasons. This is the reason why the heat pump is equipped with the "sample" function that will manage the temperature of the pool. Every hour (times vary depending on the heat pump model) the filtration pump is started for 5 minutes. If after 5 minutes, the temperature of the water is above the required temperature, the filtration turns off for one more hour. Otherwise, the filtration and the heat pump are going to keep on operating until the desired temperature is reached.



9.3 INSTALLATION INSTRUCTIONS

9.3.1 Mounting

Find a suitable location to mount the VortexLink box. Ideally, as with all pool equipment, it should be installed out of direct weather and no closer than 3m from the water's edge and a minimum 600mm above ground. Fix the mounting bracket to a solid structure and slide the VortexLink on, keeping in mind that the power cable is 1.8m long and should be plugged directly into a general power outlet, not into an extension lead.

9.3.2 Pump

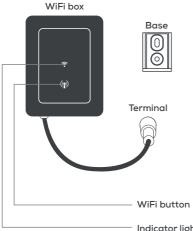
The filtration pump plugs into the 240V outlet beneath the VortexLink.

9.3.3 Chlorinator

The chlorinator connects directly into a general power outlet, not into an extension lead. Plug the black 2 pin power lead from the VortexLink into the chlorinator. Set the chlorinator to operate for the required filtration and dosing requirements.



COMPONENTS



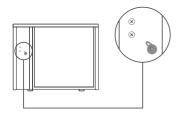
Indicator light

Green: Network connection

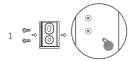
🛜 Orange: No network

Red: Failure

INSTALL POSITION



INSTALLATION



Screw base on back panel.



Slide wifi box into base.



Connect cable.



APP DOWNLOAD



Android mobile please download from



iPhone please download from



APP BINDING



1. Press WiFi button (1) for 3 seconds to enter binding program, Flight will flash.



2. Enter "Configure new device" in APP, follow indication to finish binding.

OPERATION



Heating and Cooling



Heating only

Notice:

- 1. If WiFi signal can not cover machine, please connect 10m extend cable.
- 2. The weather forecast is just for reference. APP is subject to updating without notice.



11. WARRANTY AGREEMENT

Definitions

 All capitalised expressions used in this warranty are defined in paragraph 17.

Warranty

- 2 Supreme Solar Pty Ltd warrants that its services in installing the Product will be carried out with due care and skill and subject to clauses 3, 4, 5 and 6, that the installed Product will be free from defects in workmanship for a period of twenty four (24) months after installation (warranty includes in field labour costs.) The warranty is given subject to the terms of this warranty agreement.
- 3 The Heat Pump included in the Product carries:
 - (a) in the case of a Titanium Heat Exchanger,
 - (i) a five (5) year limited warranty on Heatseeker Vortex models:
 - (ii) a seven (7) year limited warranty on Heatseeker VortexPro models;
 - (iii) a two (2) year limited warranty on Heatseeker VortexC models

from Supreme Solar Pty Ltd, 2/19 Enterprise Drive, Bundoora, Victoria, 3083 (Phone: (03) 9460 4200, Email: info@supremeheating.com.au); or

- (b) in the case of a Compressor,
 - (i) a two (2) year limited warranty on Heatseeker Vortex models;
 - (ii) a seven (7) year limited warranty on Heatseeker VortexPro models;
 - (iii) a two (2) year limited warranty on Heatseeker VortexC models

from Supreme Solar Pty Ltd, 2/19 Enterprise Drive, Bundoora, Victoria, 3083 (Phone: (03) 9460 4200, Email: info@supremeheating.com.au); or

- (c) in the case of a Evaporator, a two (2) year limited warranty from Supreme Solar Pty Ltd, 2/19 Enterprise Drive, Bundoora, Victoria, 3083 (Phone: (03) 9460 4200, Email: info@supremeheating.com.au); or
- (d) in the case of other heat pump components, a two (2) year limited warranty from Supreme Solar Pty Ltd, 2/19 Enterprise Drive, Bundoora, Victoria, 3083 (Phone: (03) 9460 4200, Email: info@supremeheating.com.au);

In field labour warranty is applicable in Capital City Metropolitan areas or within a 25km radius of an Authorised Supreme Solar Service Agent.

Labour, travel and freight costs incurred as a result of product failure are excluded from this warranty after a period of twelve (12) months. Subsequent costs are to be paid by the original purchaser. and is the only warranty given in respect of that part of the Product.

- 4 The Automatic Controller included in the Product carries:
 - (a) in the case of an Aqua-Gen 3D Automatic Controller, a one (1) year limited warranty from Space Age Electronics Pty Ltd, PO Box 4382, Homebush South, New South Wales, 2140 (Phone: (03) 5629 5833, Email: spaceage@bigpond.net.au; or
 - (b) in the case of an Aqua-Gen 3/+ Series, AquaGen 5 Series or SSV Series of Automatic Controllers, a three (3) year limited warranty from Dontek Electronics Pty Ltd, 19 Melrich Road, Bayswater, Victoria, 3153 (Phone: (03) 9762 8800, Email: service@dontekelectronics.com.au): or
 - (c) in the case of an Aqua-Gen 2 Automatic Controller, a two (2) year limited warranty (temperature sensors not covered) from Dontek Electronics Pty Ltd, 19 Melrich Road, Bayswater, Victoria, 3153 (Phone: (03) 9762 8800, Email: service@dontekelectronics.com.au):
 - (d) in the case of an VortexSwitch or VortexLink, a two (2) year limited warranty from Dontek Electronics Pty Ltd, 19 Melrich Road, Bayswater, Victoria, 3153 (Phone: (03) 9762 8800, Email: service@dontekelectronics.com.au);

and is the only warranty given in respect of that part of the Product.



- 5 The Solar Pump included in the Product carries:
 - (a) in the case of an SSGL Series Solar Pump, a two (2) year limited warranty (six (6) months for commercial installations) from Supreme Solar Pty Ltd, 2/19 Enterprise Drive, Bundoora, Victoria, 3083 (Phone: (03) 9460 4200, Email: info@supremeheating.com.au); or
 - (b) in the case of an SunSol SS Series or Booster AB Series Solar Pump, a two (2) year limited warranty. Two (2) year warranty on the motor, pump body and seal plate, and a one (1) year warranty on the mechanical seal from Reltech Australia Pty Ltd, 43–45 Kylta Road, West Heidelberg, Victoria, 3081 (Phone: (03) 9459 3838, Email: office@reltech.com.au):

A twelve (12) month in field labour warranty is applicable in Capital City Metropolitan areas or within a 20km radius of an Authorised Supreme Solar P/L or Reltech Australia P/L Service Agent.

- and is the only warranty given in respect of that part of the Product.
- 6 All other components supplied by Supreme Solar Pty Ltd carry a twelve (12) month limited warranty and is the only warranty given in respect of these components of the Product.

Exclusions

- 7 Supreme Solar Pty Ltd will not be liable under this warranty where Supreme Solar Pty Ltd's reasonable opinion a defect is caused by:
 - (a) fair wear and tear;
 - (b) negligent, careless or improper use or handling;
 - (c) non-adherence to operating, cleaning or maintenance instructions;
 - (d) harsh or adverse Pool/Spa water conditions;
 - (e) repair to or alteration of any parts of the system by any person who has not been authorised by Supreme Solar Pty Ltd to perform such a repair or alteration;
 - (f) act of God, riot, fire or other occurrence outside normal working conditions; or
 - (g) by other abuse or misuse caused by the Purchaser or a third party.
- 8 Subject to clause 9, any condition or warranty which would otherwise be implied in this agreement or in relation to the Product is hereby excluded.

- 9 Where legislation implies in this agreement or in relation to the Product any condition or warranty, and that legislation avoids or prohibits provisions in a contract excluding or modifying the application of or exercise of or liability under such condition or warranty, the condition or warranty shall be deemed to be included in this agreement. However, the liability of Supreme Solar Pty Ltd for any breach of such condition or warranty shall be subject to clause 14 and any other applicable exclusions set out in this agreement, be limited, at the option of Supreme Solar Pty Ltd, to one or more of the following:
 - (a) if the breach relates to goods:
 - the replacement of the goods or the supply of equivalent goods;
 - (ii) the repair of such goods;
 - (iii) the payment of the cost of having the goods repaired; and
 - (b) if the breach relates to services:
 - (i) the supplying of the services again; or
 - (ii) the payment of the cost of having the services supplied again.

What Supreme Solar Pty Ltd will do

- 10 For defects relating to installation of the Product, Supreme Solar Pty Ltd will, in its absolute discretion:
 - (a) repair the Product or pay for the cost of having the Product repaired; or
 - (b) replace the Product or supply an equivalent Product; or
 - (c) pay for the cost of replacing the Product or acquiring an equivalent Product;

if the terms and conditions of this warranty are satisfied. Supreme Solar Pty Ltd will not be liable for any other loss or damage (including consequential or indirect damages).

- 11 Supreme Solar Pty Ltd reserves the right to charge the Purchaser, at Supreme Solar Pty Ltd's current hourly rate, for the cost of examining the Product if such examination by Supreme Solar Pty Ltd reveals that the Product:
 - (a) is not defective; or
 - (b) is defective as a result of any of the events specified in paragraph 7.



What the Purchaser must do

- 12 Any claim under this warranty must be made at the earliest stage that the defect becomes obvious to enable prompt action and to avoid further damage and must be made no later than one (1) month of the defect becoming obvious.
- 13 Any claim for warranty must be accompanied by appropriate documentation which stipulates the date of installation, the invoice number, the details of the alleged defect and any other information reasonably required by Supreme Solar Pty Ltd.
- 14 Purchaser agrees to pursue any claims in relation to defective parts against the manufacturers or suppliers referred to in clause 3, 4, 5 and 6.

Whole agreement

15 This warranty and any warranties implied by law which are not capable of being excluded or modified from the whole warranty agreement between Supreme Solar Pty Ltd and the Purchaser and all other warranties, express or implied, whether arising by statute or otherwise, are excluded and cancelled.

Governing law

16 This warranty is governed by the laws of the State specified in paragraph 17(c).

Defined terms

17 (a) **Purchaser** The person who has

purchased the Product and is able to produce proof of such purchase

(b) **Product** Supreme Solar Pty Ltd

pool heating system

(c) Governing law

(paragraph 16): Victoria, Australia

Consumer guarantee

18 This warranty is provided in addition to consumer guarantees and does not alter, limit or replace them.

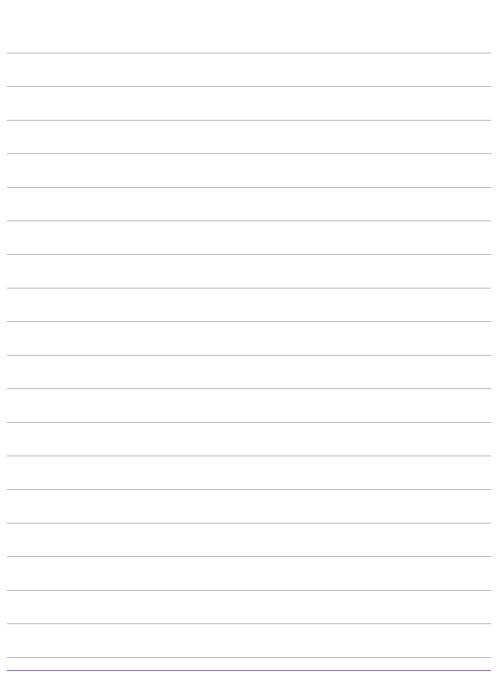


NOTES	



NOTES		









1300 787 978 supremeheating.com.au







