

N HEATSEEKER NOVAS



INSTALLATION & USER MANUAL



**Supreme
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Pool & Spa Heaters





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HEATSEEKER NOVAS

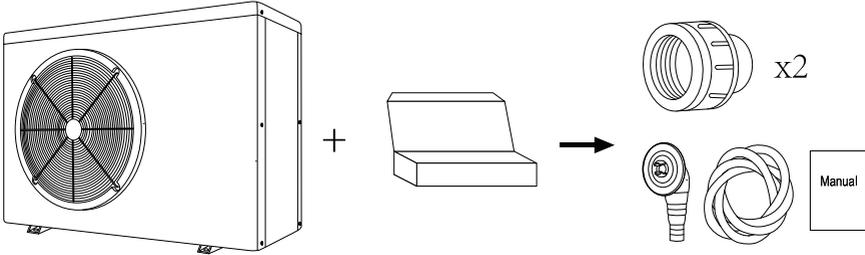
INSTALLATION & USER MANUAL

FOR USERS		
1.	General information	02
1.1.	Contents	02
1.2.	Operating conditions and range	02
1.3.	Kind reminder	03
2.	Operations And Use	06
2.1.	Main Interface	06
2.2.	Operation Instructions	06
2.3.	Functional Interface	07
2.4.	Functional Interface	08
2.5.	Boost Shutdown	09
2.6.	Date Setting	10
2.7.	Timing Settings	12
2.8.	Status Query	15
2.9.	History Of The Fault	17
2.10.	Brightness Adjustment	18
2.11.	Scene Settings	19
2.12.	Maintenance And Winterizing	20
3.	Technical specification	21
FOR INSTALLERS AND PROFESSIONALS		
4.	Transportation	12
5.	Installation and maintenance	13
5.1.	Notice before installation	13
5.2.	Installation instructions	14
5.3.	Trial after installation	21
6.	Trouble shooting guide	22
7.	Error codes	23
ANCILLARY PRODUCTS		
8.	NovaSwitch	26
8.1.	Description	26
8.2.	Operation	26
8.3.	Heating priority	26
8.4.	Installation instructions	27
9.	NovaLink	28
9.1.	Description	28
9.2.	Operation	28
9.3.	Heat demand	28
9.4.	Installation instructions	29
10.	Wifi Setting	30
WARRANTY		
11.	Warranty agreement	37

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
Temperature Setting	Heating	9°C - 40°C

The heat pump will have ideal performance in the operation range Air 15°C - 25°C

1.3. KIND REMINDER

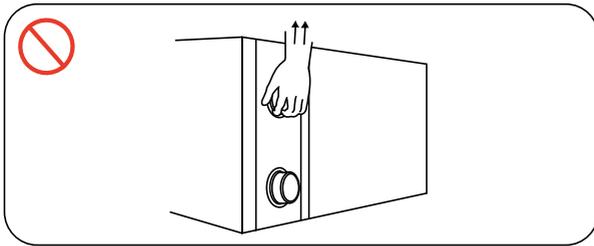


ATTENTION

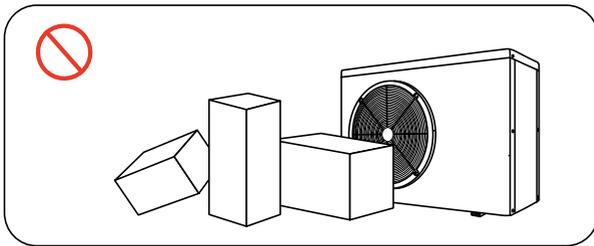
This heat pump has power-off memory function. When the power is recovered, the heat pump will restart automatically.

1.3.1. The heat pump can only be used with pool water. It can **NEVER** be used to heat or cool other flammable or turbid liquid.

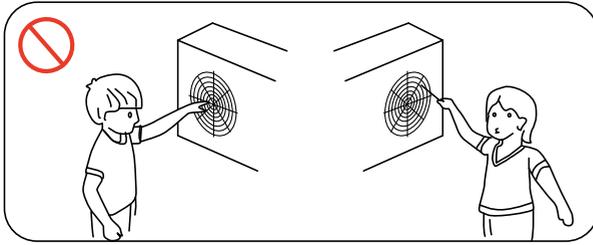
1.3.2. When moving the heat pump, do not lift the water union. This will damage the titanium heat exchanger.



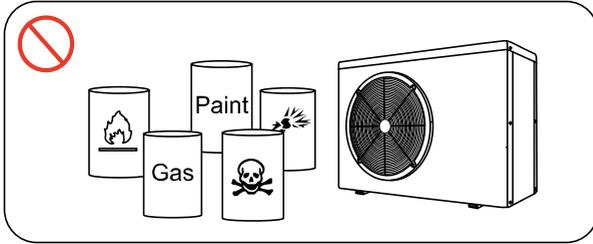
1.3.3. Do not obstruct the air inlet or outlet of the heat pump.



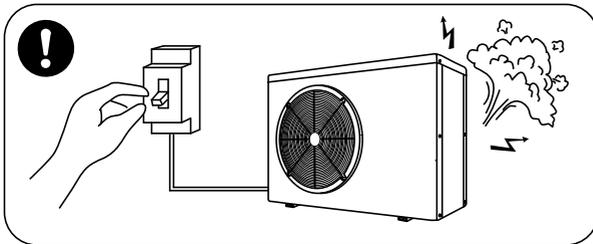
1.3.4. Do not obstruct or insert any objects into inlet or outlet of the heat pump. The efficiency may be reduced or even stopped.



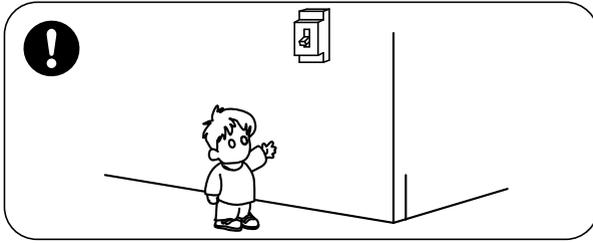
1.3.5. To avoid fire hazards, do not store or use combustible gas or liquids such as thinners, paints or fuels near the heat pump.



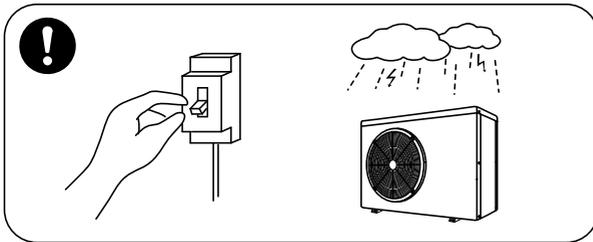
1.3.6. If you detect any abnormal noises, odours, smoke or leaks from the heat pump, immediately switch off the power supply and contact your local dealer. Do not attempt to repair the heat pump yourself.



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



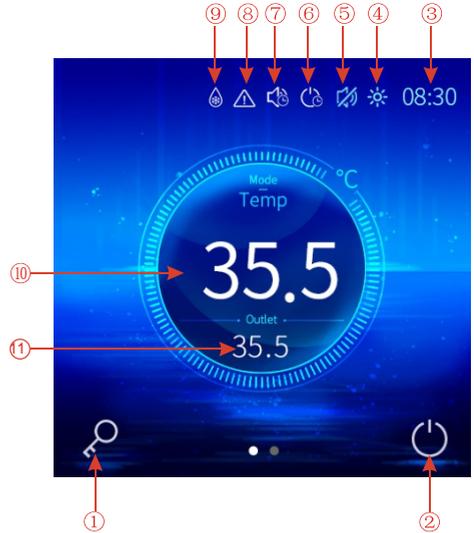
1.3.8. Please disconnect the heat pump from the power supply during electrical storms.



2. OPERATION AND USE

COLOR TOUCH DISPLAY INTERFACE INTRODUCTION

2.1 Main Interface



2.2 Operation Instructions

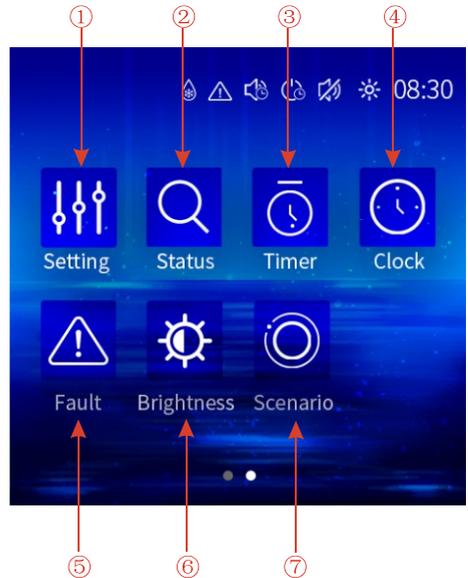
	DESIGNATION	OPERATION
1	Lock	Click to lock the screen, Input "25" to unlock the screen by pressing the "lock" button.
2	ON/OFF	Press to start/shut off the unit.
3	System Time	Show system time.
4	Mode Icon	Unit running mode.
5	Run Mute Icon	The unit is running in mute mode.
6	Timing ON/OFF Icon	Time ON/OFF is enabled.
7	Timed Mute Icon	Time ON/OFF is enabled.
8	Fault Icon	Unit failure display.
9	Defrost Icon	Defrosting during normal operation of the unit.
10	Water Inlet Temperature	Click to enter mode setting and the target temp. setting interface.
11	Water Outlet Temperature	Display outlet water temperature.

OPERATION AND USE

COLOUR TOUCH DISPLAY INTERFACE INTRODUCTION

2.2 Functional Interface

Slide the screen in the main interface to enter the function setting interface.



2.3.1 Operation Instructions

	DESIGNATION	OPERATION
1	Setting	Click this button to view the unit state and the parameter.
2	Status	Click to enter the unit status interface.
3	Timer	Click to enter the time setting interface.
4	Clock	Click to enter the system time setting interface.
5	Fault	Click to view fault history.
6	Brightness	Click to adjust the screen brightness.
7	Scenario	Click to enter the scene setting interface.

2.4 Boot And Shutdown

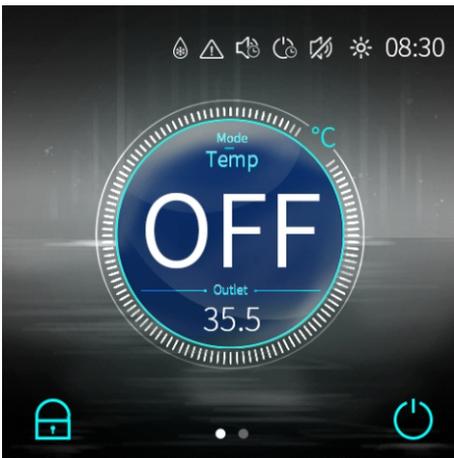
In shutdown status, click on/off button then the unit will be booted;

In booting status, click on/off button then the unit will be shut down.

Booting Status



Shutdown Status



2.5 Mode Setting And Target Temperature Setting



In the main interface, click ⑩ interface displays as follows:



2.5.1 Modesetting

Swipe up and down ①, and then you can select the corresponding mode, click “OK” to save and exit or click “<” to exit without saving.

Note: when the unit is designed for single automatic mode or single thermal mode, the mode can not be switched.

2.5.2 Target temp. setting

Swipe up and down ②, then you can select the corresponding target temperature, click “OK” to save and exit or click “<” to exit without saving.

2.6 System Time Setting



In the functional interface, click ④ interface displays as follows:



2.6.1 Date Setting

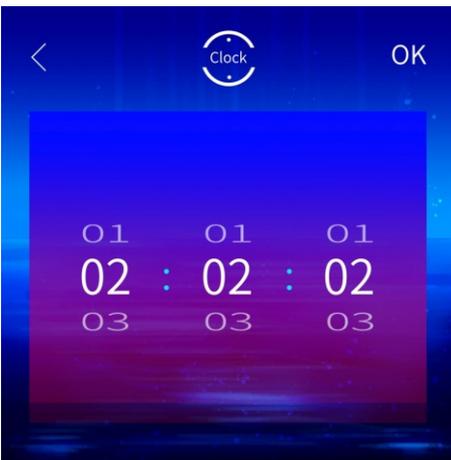
Click ① interface displays as follows:



Swipe up and down the month, day, and year to select the corresponding date, Click “OK” to save and exit, or click “<” to exit without saving.

2.6.2 Clock setting

Click ② interface displays as follows:

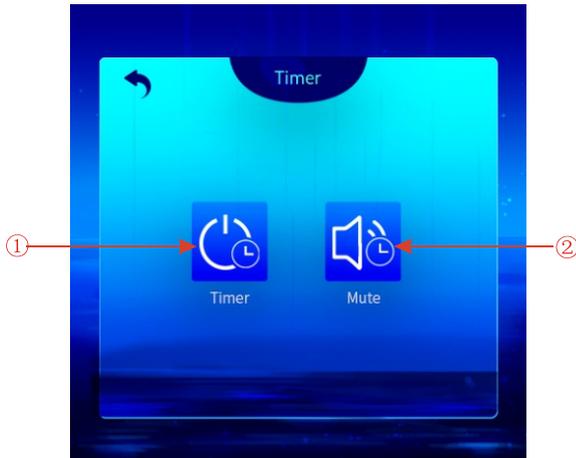


Swipe up and down the hours, minutes, and seconds to select the corresponding date,click “OK” to save and exit, or click “<” to exit without saving.

2.7 Timing Settings

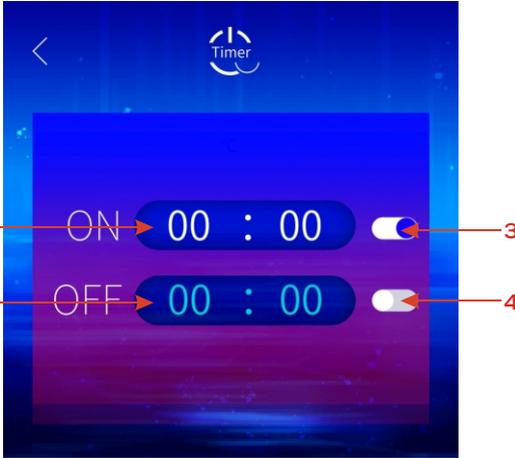


In the functional interface, click ③ interface displays as follows:



2.7.1 Timing ON/OFF Settings

Click ① interfaced displays as follows:

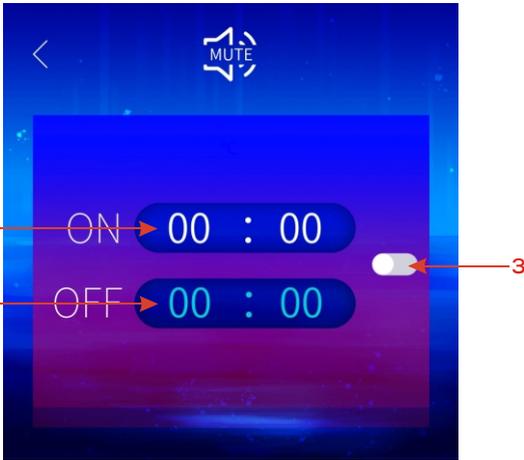


Operations And Description

	DESIGNATION	BUTTON POSITION	THE BUTTON FUNCTION
1	Timing On Setting		Click to set start time of the timing.
2	Timing Off Setting		Click to set end time of the timing.
3	Timing Start Button	Open: Right End: Left	Click this button to start or end timing start setting function.
4	Timing End Button	Open: Right End: Left	Click this button to start or end timing end setting function.

2.7.2 Timing Silent Function Setting

Click ② interface displays as follows:



Operations And Description

	DESIGNATION	BUTTON POSITION	THE BUTTON FUNCTION
1	Timing Silent Start Time		Click this button to set the timing silent start time.
2	Timing Silent End Time		Click this button to set the timing silent end time.
3	Timing Silent Button	Open: Right End: Left	Click this button to enable or disable timing silent function.
4	Timing End Button	Open: Right End: Left	Click this button to start or end timing end setting function

2.8 Status Query



In the functional interface, click ② interface displays as follows:



Click "About" to view unit information:



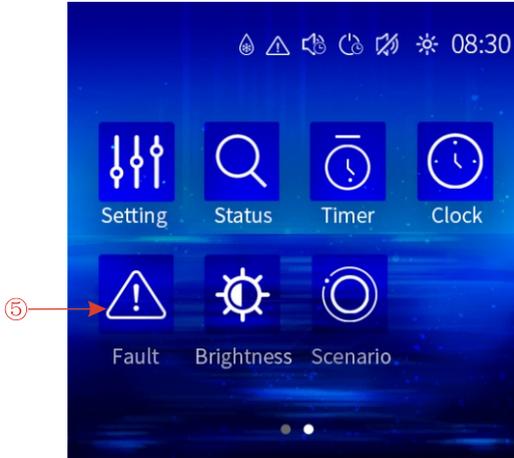
About	
DTU/WIFI Code	WH9921123456
Main PCB Program Code	28
Main PCB Program Version	V 2.7
Display Program Code	82400339
Display Program Version	V 1.0

Click "Status" to view the unit status:



Status	
Machine State	ON
Operating Mode	Heating
Comp.Frequency	60 Hz
Inlet temp.	25.0 °C
Outlet temp.	27.0 °C
Ambient Temp.	20.0 °C

2.9 History Of The Fault



In the functional interface, click ⑤ interface displays as follows:



If there is no fault, the main interface does not display the fault icon;
When a fault occurs, the fault icon in the main interface will flash; the failure interface will record time, code, name of the fault.

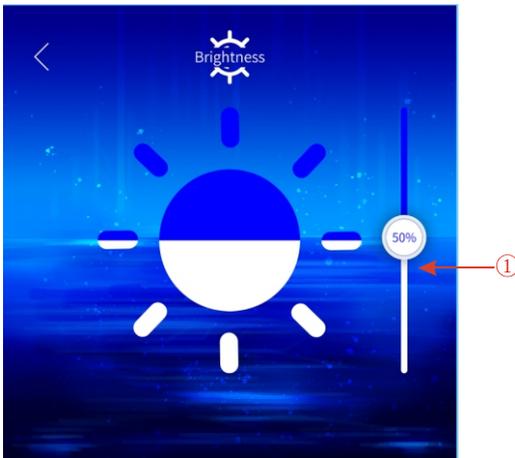
After trouble shooting, the main interface does not display the fault icon;
the failure interface will record time, code, name of the fault;

Failure record is in reverse order, according to the happening time; Click “” key, you can delete the fault record.

2.10 Brightness Adjustment



In the functional interface, click ⑥ interface displays as follows:



Slide up and down ①, and then you can adjust the screen brightness, click “” exit.

2.11 Scene Settings

In the functional interface, click ⑦ interface displays as follows:



Click "Boost" to switch to Boost scene mode (reserve);

Click "Eco." to switch to Eco. scene mode (reserve);

Click "Auto" to switch to Auto scene mode;

Click "Silent" to switch to Silent scene mode;

This feature is only available for machines with SceneMode functionality, not for all machines.

Remark: the color touch display can show the temperature unit as "°C" or "°F" according to the unit model you bought.

2.12 MAINTENANCE AND WINTERIZING

2.12.1. Maintenance



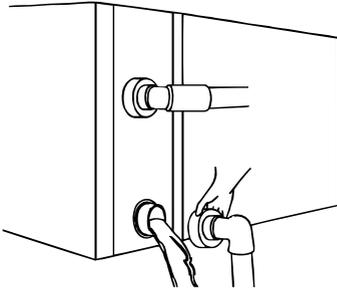
ATTENTION

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

1. Regularly clean the evaporator with household detergents or clean water. NEVER use gasoline, thinners or any similar fuel.
2. Check bolts, cables and connections regularly.
3. Every three months spray a surface insecticide on the surfaces around the unit to prevent ant and insect ingress.

2.12.2. 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.



IMPORTANT

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

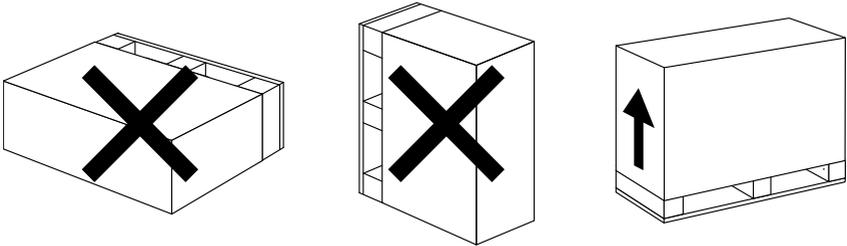
SPECIFICATIONS					
MODEL		9 KW	13 KW	17 KW	20 KW
Mode Type		Heat & Cool			
Discharge		Side			
Fan Quantity		1			
Performance at Air 27°C, Water 26°C, Humidity 80%					
Heat Capacity	kW	9.5	13	16.5	20
COP		6.4-13.5	5.8-13.1	6.2-13.6	6.5-13.8
Performance at Air 15°C, Water 26°C, Humidity 70%					
Heat Capacity	kW	7.1	9.2	12.6	14.5
COP		4.7-7.4	4.5-7.1	4.7-7.4	4.8-7.5
General					
Rated input power at air 15°C	kW	0.20-1.51	0.27-2.04	0.32-2.68	0.35-3.02
Rated input current at air 15°C	Amps	8.4	10.9	16.6	17.5
Circuit Breaker	Amps	15	15	20	25
Power Supply		240v / 50Hz / 1PH			
Pool Volume - Cold Climate	Litres	≤20,000	≤30,000	≤40,000	≤50,000
Pool Volume - Warm Climate	Litres	≤30,000	≤40,000	≤50,000	≤60,000
Advised Flow Rate	L/min	53	66	86	100
Inlet / Outlet	mm	50			
Compressor		Twin-rotary Mitsubishi DC Inverter			
Heat Exchanger		Spiral titanium tube in PVC			
Casing		Black ABS			
Noise Level (1m)	dBA	39-51	42-53	43-54	44-55
Weight / Dimensions					
Net Weight	kg	45	45	60	70
Net Dimensions L x W x H	mm	1002 x 403 x 602	1002 x 403 x 602	1048 x 435 x 767	1161 x 470 x 862

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

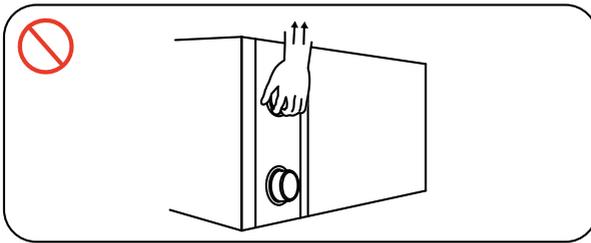
1. The values indicated are valid under ideal conditions: Pool covered with an isothermal cover.
2. Related parameters are subject to adjustment periodically for technical improvement without further notice. For details please refer to nameplate.

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

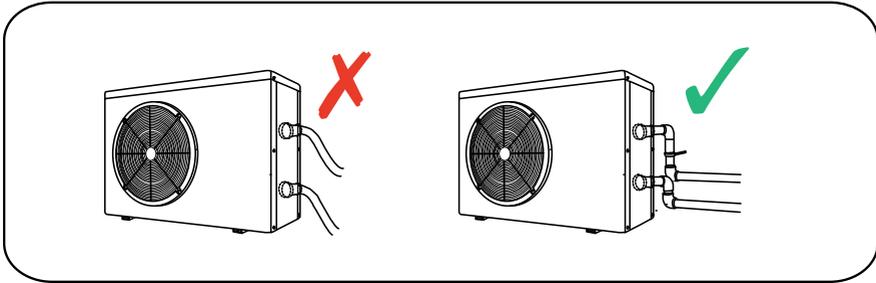


ATTENTION

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



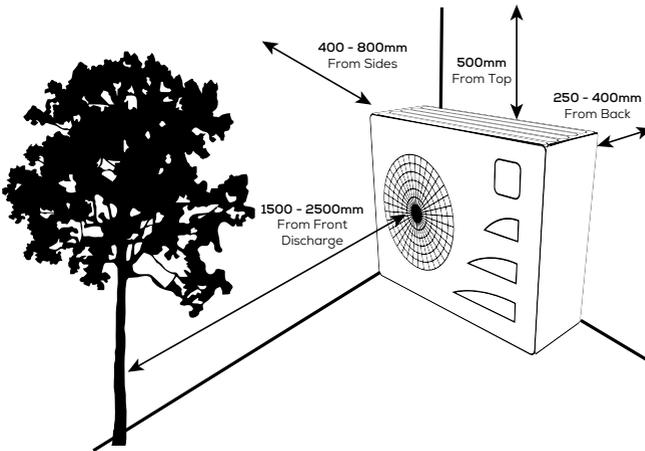
ATTENTION

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

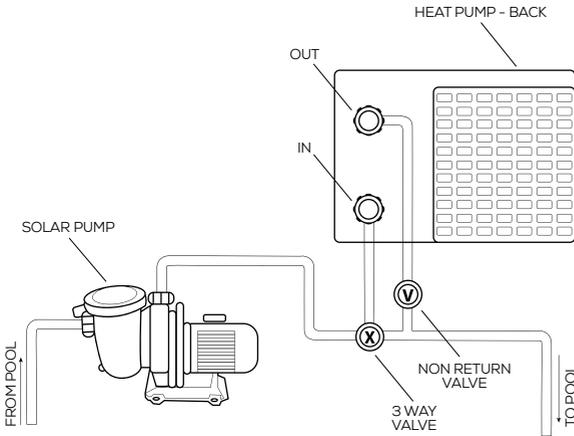


ATTENTION

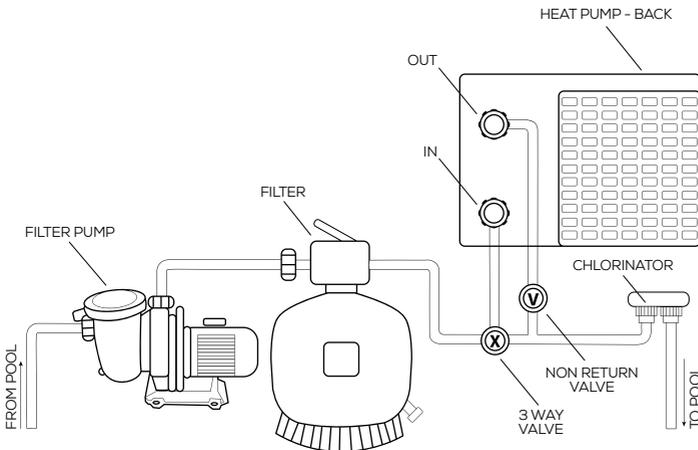
Automatic Dosing

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.

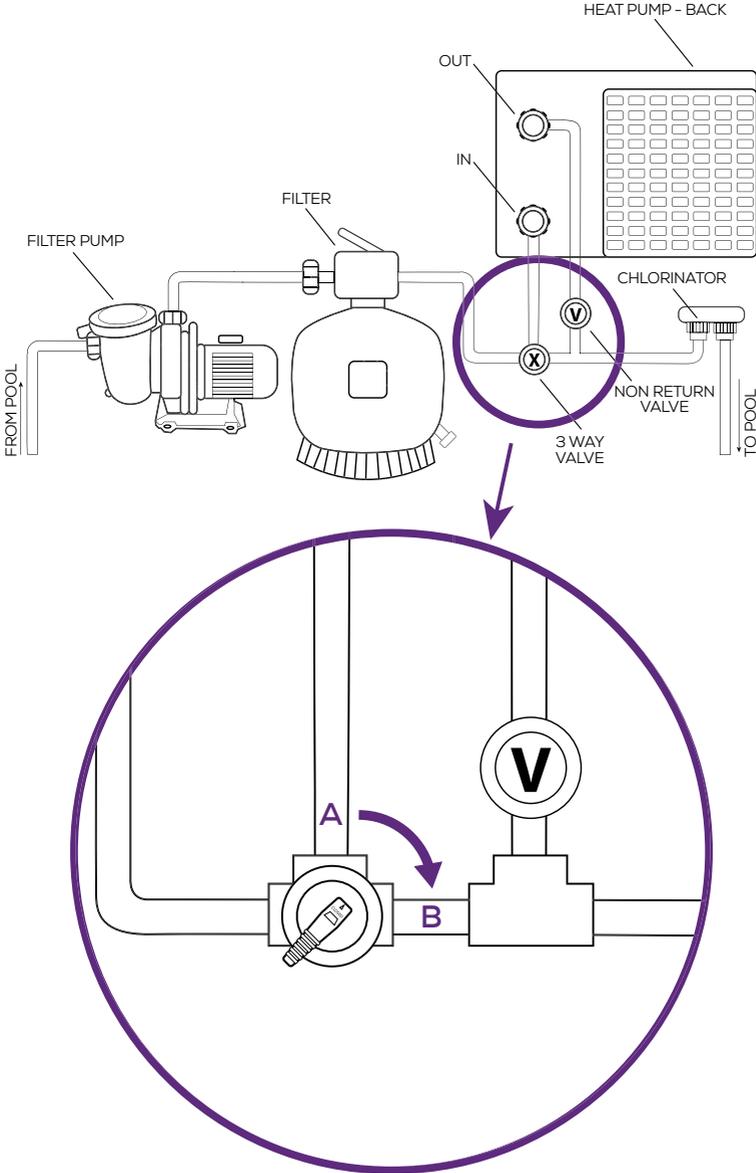
Independent System



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
3. Slowly open the valve towards Position B until the display error code of "E03" disappears.



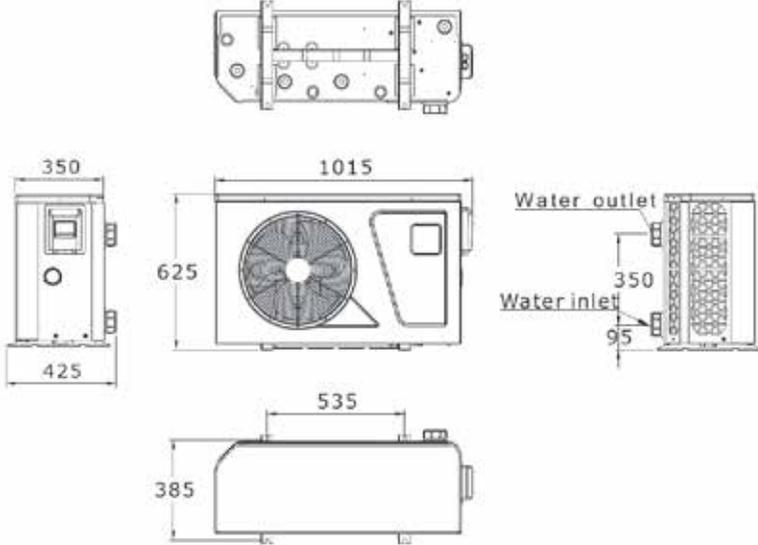
ATTENTION

Bypass Installation

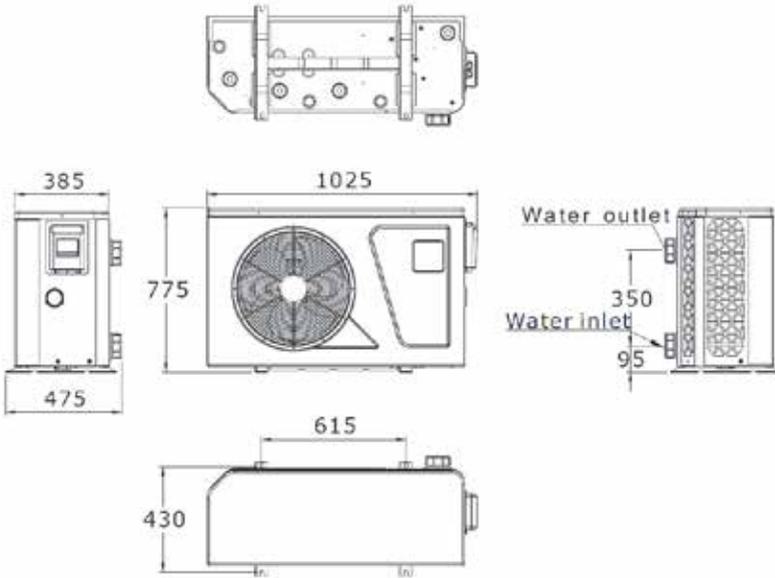
Operation without a bypass or with improper bypass adjustment may result in suboptimal heat pump operation and possible damage to the heat pump. Failure to observe this instruction will void the warranty.

HEATPUMP DIMENSIONS

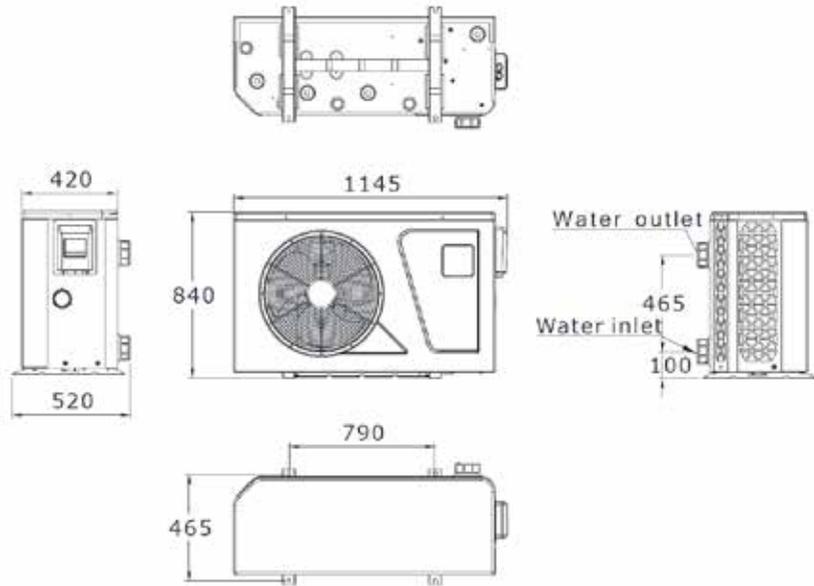
5.2.2. Heatseeker NovaS 9kW



5.2.3. Heatseeker NovaS 13kW



5.2.4. Heatseeker NovaS 17kW



5.2.5. 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.

5.2.6. Wiring & protecting devices and cable specification

1. 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 $\leq 30\text{mA}$).
5. The layout of power cable and signal cable should be orderly and not affect each other.

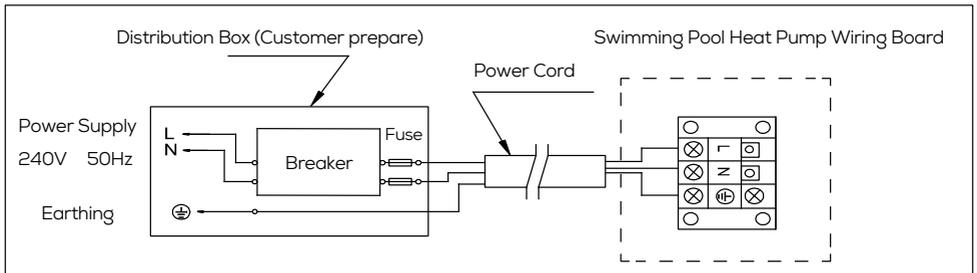


ATTENTION

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

1. Wiring Diagram

A. For power supply: 240V 50Hz



2. Options for protecting devices and cable specification

MODEL		9 KW	13 KW	17 KW	20 KW
Breaker	Minimum Rated Current A	15	15	20	25
	Rated Residual Action Current mA	30	30	30	30
Fuse A		15	15	20	25
Power cord (mm ²)		3x1.5	3x2.5	3x4	3x6
Signal cable (mm ²)		3x0.5	3x0.5	3x0.5	3x0.5

NOTE: The above data is adapted to power cord $\leq 10\text{m}$. If power cord is $>10\text{m}$, wire diameter must be increased. The signal cable can be extended to 50m at most.

5.3. TRIAL AFTER INSTALLATION



ATTENTION

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

5.3.1 Inspection before use

1. 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 GUIDE

FAILURE	REASON	SOLUTION
Heat pump doesn't run	No power	Wait until the power recovers
	Power switch is off	Switch on the power
	The breaker is off	Check and turn on the breaker
Fan running but with insufficient heating	Evaporator blocked	Remove the obstacles
	Air outlet blocked	Remove the obstacles
	3 minutes start delay	Wait patiently
Display normal, but no heating	Set temp. too low	Set proper heating temp.
	3 minutes start delay	Wait patiently

DISPLAY	DESCRIPTION	REASONS/SOLUTIONS
E03	Insufficient or no water flow/ protection	<p>Ensure water flow through circulating pump/filtration system;</p> <p>1a. Ensure circulating pump is primed (independent system).</p> <p>1b. Ensure water flow through filtration i.e. filter pump is primed, check filter pressure, visible water flow (inline system).</p> <p>2. Adjust flow through bypass valve in order to direct more flow to heat pump (specific to plumbing configuration).</p> <p>3. Possible blockage.</p> <p>4. Check flow switch and PCB wiring (technician only).</p>
F07-F10	Power (voltage) supply outside acceptable operating range	Engage electrician to confirm power supply (refer to technical specifications).
E06	Excessive temperature differential between inlet and outlet water (insufficient water flow/protection)	<p>Ensure water flow through circulating pump/filtration system.</p> <p>1a. Ensure circulating pump is primed (independent system).</p> <p>1b. Ensure water flow through filtration i.e. filter pump is primed, check filter pressure, visible water flow (inline system).</p> <p>2. Adjust flow through bypass valve in order to direct more flow to heat pump (specific to plumbing configuration).</p> <p>3. Possible blockage.</p>
Tp	Ambient temperature too high or too low protection	Wait until air temperature returns to heat pump operating range (refer to technical specifications).
E19/E29	Anti-freezing reminder	<p>Anti-freeze mode is activated;</p> <p>When water inlet temperature $\leq 2^{\circ}\text{C}$ and air temperature $\leq 0^{\circ}\text{C}$, heat pump will automatically start running in heating mode.</p> <p>When water inlet temperature $\geq 15^{\circ}\text{C}$ or air temperature $\geq 1^{\circ}\text{C}$, heat pump will be powered off or on standby.</p>



ATTENTION

If above solutions don't work, please contact your installer with detailed information and your model number.

7. ERROR CODES

Electronic control fault table

DISPLAY	FAILURE DESCRIPTION	REASON	SOLUTION
Non	Standby		
Non	Normal boot		
P01	Inlet Temp. Sensor Fault	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
P02	Outlet Temp.Sensor Fault	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
P04	Coil Temp.Sensor Fault	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
P05	Amibent Temp.Sensor Fault	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
P07	Suction Temp.Sensor Fault	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
P081	Discharge Temp. Sensor Fault	The temp. Sensor is broken or short circuit	Check or change the temp. Sensor
E01	High Pressure Prot.	The high-pressure switch is broken	Check the pressure switch and cold circuit
E02	Low Pressure Prot.	Low pressure1 protection	Check the pressure switch and cold circuit
E03	Flow Switch Prot.	No water/little water in water system	Check the pipe water flow and water pump
E07	Anti-freezing Prot	Water flow is not enough	Check the pipe water flow and whether water system is jammed or not
E19	Primary Anti-freezing Prot.	The ambient temp. is low	
E29	Secondary Anti-freezing Prot.	The ambient temp. is low	
E06	Inlet and outlet temp. too big	Water flow is not enough and low differential pressure	Check the pipe water flow and whether water system is jammed or not
Non	Low temperature protection	The environmental temp. is low	
E051	Comp. Overcurrent Prot.	The compressor is overload	Check whether the system of the compressor running normally
P082	Exhaust Air over Temp Prot.	The compressor is overload	Check whether the system of the compressor running normally

E08	Communication Fault	Communication failure between wire controller and mainboard	Check the wire connection between remote wire controller and main board
P09	Antifreeze Temp. Sensor Fault	Antifreeze temp sensor is broken or short circuited	Check and replace this temp sensor
E05	Waterway Anti-freezing Prot.	Water temp. or ambient temp. is too low	
F051	EC fan feedback Fault	There is something wrong with fan motor and fan motor stops running	Check whether fan motor is broken or locked or not
PP	Pressure sensor Fault	The pressure sensor is broken	Check or change the pressure Sensor or pressure
F031	Fan Motor1 Fault	1. Motor is in locked-rotor state 2. The wire connection between DC-fan motor module and fan motor is in bad contact	1.Change a new fan motor 2.Check the wire connection and make sure they are in good contact
TP	Low AT Protection	Ambient temp is too low	
F032	Fan Motor2 Fault	1. Motor is in locked-rotor state 2. The wire connection between DC-fan motor module and fan motor is in bad contact	1.Change a new fan motor 2.Check the wire connection and make sure they are in good contact
E081	Communication Fault (speed control module)	Speed control module and main board communication fail	Check the communication connection

Frequency conversion board fault table

DISPLAY	FAILURE DESCRIPTION	REASON	SOLUTION
F01	Drv1 MOP alarm	MOP drive alarm	Recovery after the 150s
F02	Inverter offline	Frequency conversion board or main board communication failure	Check the communication connection
F03	IPM protection	IPM modular protection	Recovery after the 150s
F04	Comp. Driver Failure	Lack of phase, step or drive hardware damage	Check the measuring voltage check frequency conversion board hardware
F05	DC Fan Fault	Motor current feedback open circuit or short circuit	Check whether current return wires connected motor
F06	IPM Overcurrent	IPM input current is large	Check and adjust the current measurement
F07	Inv. DC Overvoltage	DC bus voltage > Dc bus over-voltage protection value	Check the input voltage measurement

F08	Inv. DC Lessvoltage	DC bus voltage<Dc bus over-voltage protection value	Check the input voltage measurement
F09	Inv. Input Lessvolt.	The input voltage is low, causing the inputcurrent is high	Check the input voltage measurement
F10	Inv. Input Overvolt.	The input voltage is too high, more than outage protection current RMS	Check the input voltage measurement
F11	Inv. Sampling Volt.	The input voltage sampling fault	Check and adjust the current measurement
F12	Comm. Err DSP-PFC	DSP and PFC connect fault	Check the communication connection
F26	Input Over Cur.	The equipment load is too large	
F27	PFC fault	The PFC circuit protection	Check the PFC switch tube short circuit or not
F15	IPM Over heating	The IPM module is overheat	Check and adjust the current measurement
F16	Weak Magnetic Warn	Compressor magnetic force is not enough	
F17	Inv. Input Out Phase	The input voltage lost phase	Check and measure the voltage adjustment
F18	IPM Sampling Cur.	IPM sampling electricity is fault	Check and adjust the current measurement
F19	Inv. Temp. Probe Fail	Sensor is short circuit or open circuit	Inspect and replace the sensor
F20	Inverter Overheating	The transducer is overheat	Check and adjust the current measurement
F22	Inv. Overheating Warn	Transducer temperature is too high	Check and adjust the current measurement
F23	Comp. OverCur. Warn	Compressor electricity is large	The compressor over-current protection
F24	Input Over Cur. Warn	Input current is too large	Check and adjust the current measurement
F25	EEPROM Error Warn	MCU error	Check whether the chip is damaged Replace the chip
F28	V15V over/undervoltage fault	The V15V is overload or undervoltage	Check the V15V input voltage in range 13.5v~16.5v or not



ATTENTION

Please contact your installer with detailed information and your model number.

8. NOVA SWITCH



CAUTION

Heatseeker NovaS & Heatseeker NovaPro series heat pumps use a 240V relay and are compatible with NovaSwitch & NovaLink accessories only. These are to be installed by a qualified electrician. Previous generation VortexSwitch & VortexLink controllers are NOT compatible.

8.1 DESCRIPTION

A plug and play option for heat pump systems with independent circulation pumps. Can be fitted during the installation of the heat pump.

8.2 OPERATION

The NovaSwitch is designed to switch a 240Vac pump maximum rated to 10 Amps 2400 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.

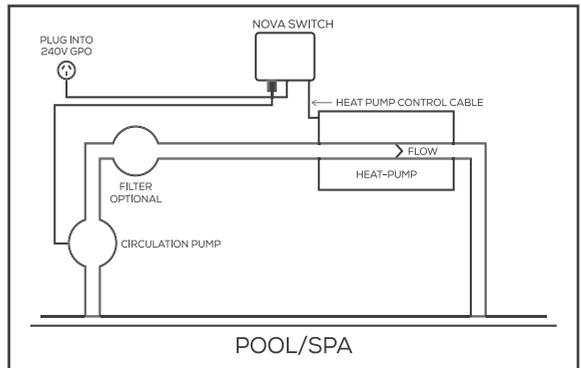
8.3 HEATING PRIORITY

The heat pump is designed to heat or cool the water of the pool only when the water circulates through it. By connecting the NovaSwitch to the heat pump, and then the circulation pump to the NovaSwitch, 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 30 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 30 minutes before sampling the water temperature again.

If the heat pump senses that the water has cooled/heated below/above the temperature set-point, 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.



8.4 INSTALLATION INSTRUCTIONS

8.4.1 Mounting

Find a suitable location to mount the NovaSwitch 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 NovaSwitch 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.

8.4.2 Pump

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

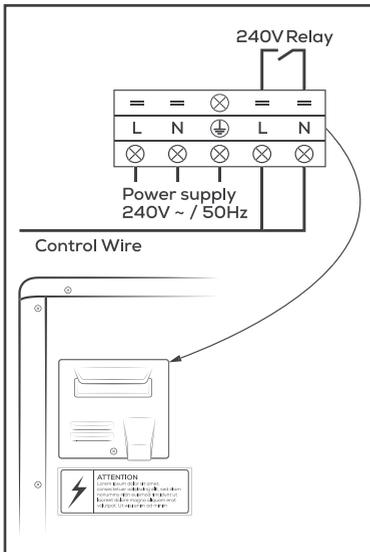
8.4.3 Heating Priority



ATTENTION

Must be installed by an electrician.

Connect the heat pump control cable from the NovaSwitch 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. NOVA LINK



CAUTION

Heatseeker NovaS & Heatseeker NovaPro series heat pumps use a 240V relay and are compatible with NovaSwitch & NovaLink accessories only. These are to be installed by a qualified electrician. Previous generation VortexSwitch & VortexLink controllers are NOT compatible.

9.1 DESCRIPTION

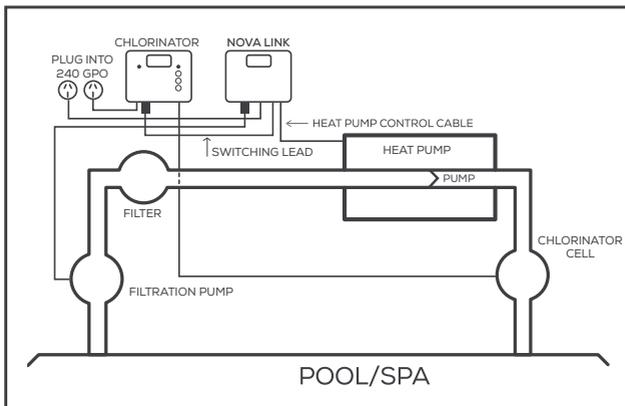
An all in one system for autonomous control of heat pumps in line with the filtration system. This unit permits the heat pump to run outside of filtration hours set by sanitation timers allowing for full automatic heat demand.

9.2 OPERATION

The NovaLink 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. NovaLink 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.

9.3 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 4 and 8 hours a day. But such a time sometimes is not sufficient 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 operating until the desired temperature is reached.



9.4 INSTALLATION INSTRUCTIONS

9.4.1 Mounting

Find a suitable location to mount the NovaLink 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 NovaLink 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.

9.4.2 Pump

The filtration pump plugs into the 240V outlet beneath the NovaLink. (Marked pump on the controller face).

9.4.3 Heat Demand

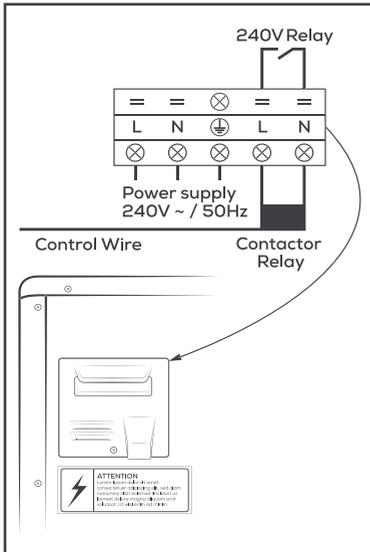


ATTENTION

Must be installed by an electrician.

Connect the Heat Control cable from the controller to the following points for the appropriate heat pump. The relay must be enclosed within the heater. Damage caused by incorrect connections will void warranties.

Connections for compatible Nova heat pumps are:



10. WIFI SETTING

10.1 User Privacy Instructions

We take your privacy very seriously and will inform you how we use the data. Permission will be obtained before user's private data, such as mailboxes & address, are uploaded to the cloud.

10.2 Description

- Receive data signal from cloud server and transmit to the main device;
- Receive data signal from main device and transmit to cloud server;
- To achieve remote upgrade the WIFI module baseplate MCU by cloud server;
- To achieve the remote upgrade of the main device by WIFI module baseplate MCU.

10.3 Technical Parameters

OPERATING VOLTAGE: DC8V~12V (Recommended value 12V)

OPERATING CURRENT: Max. recurrent peak 1A, average standby current 50mA

TEMP. RANGE: Operating Temp.: -30°~+70°; Storage Temp.: -40°~+85°

LED INDICATOR LIGHT:

4 lights, Network configuration indicator,router connection indicator, cloud server connection indicator, 485 communication indicator;

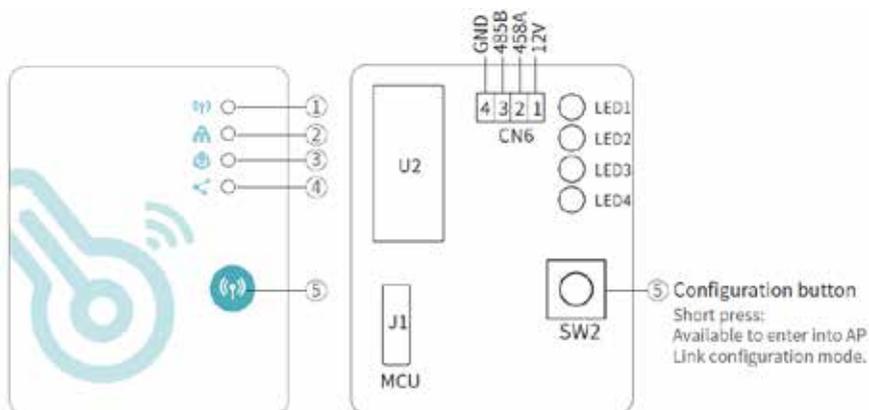
DIMENSION(L×W×H): 78mm×63mm×24mm

10.4 Installation

- There is a magnet on the back of the WIFI module, it can be installed indoors or outdoors, and avoid direct sunlight;
- Please scan the following QR code to download APP:



10.5 Functional Description



ITEM	NAME	LONG LIGHT	SLOW FLASH	EXTINGUISH
①	Network configuration indicator	Configuring Network	SmartLink configuring	Done
②	Router connection indicator	Normal	Abnormal	----
③	Cloud server connection indicator	Normal	Abnormal	----
④	485 communication indicator	Normal	Abnormal	----

10.6 Account Login

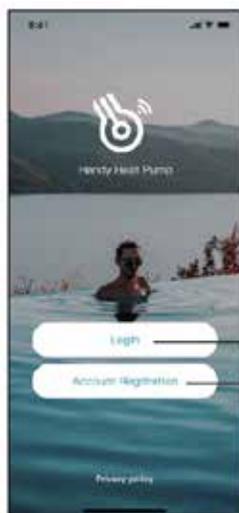


Fig.1 Home page

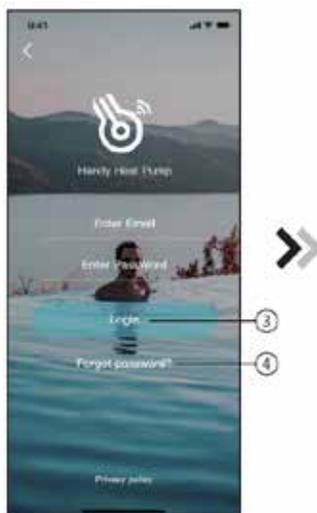


Fig.2 Login interface

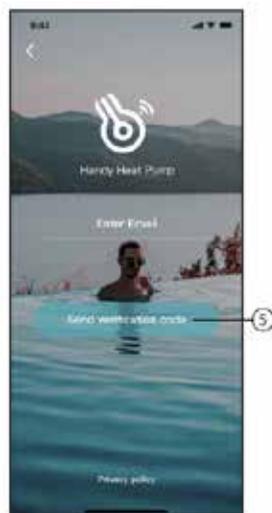


Fig.3 Register and retrieve passwords

1. Account registration: Click 1 (Fig. 1) on the home page to jump to the account registration interface (Figure 3).
2. Login: Click 2 (Fig.1) on the home page to jump to the login interface (Fig.2) and follow the instructions on the page (as shown in the figure). Enter your registered email address and password, and click 3 to jump to the device list.
3. Forgot Password: When you forget your password, click 4 (Fig.2) and jump to the password forgotten interface (Fig.3). Fill in the relevant information according to the page instructions, click 5 to send the email verification code, and operate according to the page instructions.

10.7 Add Device

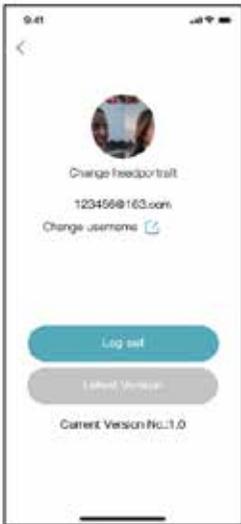


Fig.5 The left-hand menu

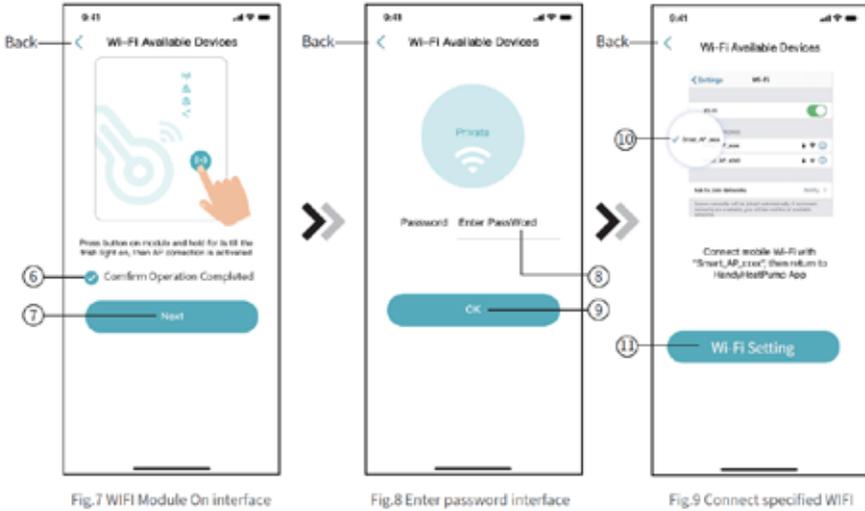


Fig.4 My Device interface



Fig.6 Add Device interface

10.8 WIFI Configure Network



1. Follow the instructions on the page (Fig.7), press button on module and hold for 1 second until two lights are on, then AP connection is activated, click 6 to confirm, click 7 to turn the page;
2. Click 8 to enter the WiFi password for the current connection, click 9 to confirm;
3. Jump to system settings, connect specified WiFi, click 10 to select the "Smart_AP_xxx", click 11 to popup window (Fig.10), follow the instruction and then jump to WiFi setting interface (Fig.11);

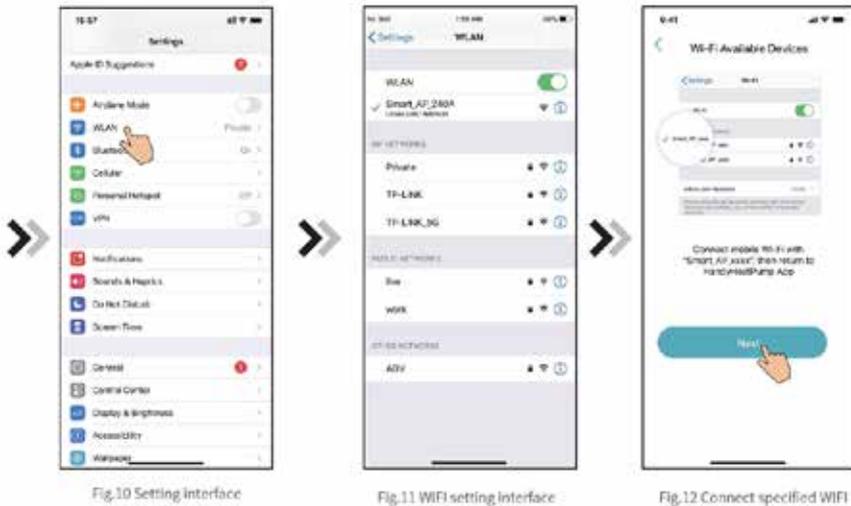




Fig.13 Configure Network interface



Fig.14 Bond Device interface



Fig.15 Scanning interface

4. Slide the page back to configure network interface (Fig. 12), click 13 to cancel, Click 12 to popup window (Fig. 10), connect to the available WIFI network, and slide back to the page to configure the network, click 14 to turn next page (Fig. 13); click 15 to bond device (Fig. 14);
5. Click "OK" (Fig.15) to allow the App to use the camera for scanning the WH barcode on the heat pump unit (Fig.16);
6. Click "OK", device bond is done (Fig.17);
7. After WIFI and DTU bonding is done, and jump back to My Device (Fig. 18).



Fig.16 WF barcode

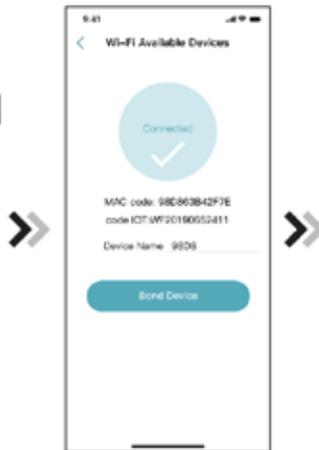


Fig.17 Bond device done interface



Fig.18 Device management interface

10.9 Device Management



Fig.20 Modify target temperature



Fig.19 Device Main Interface



Fig.21 The right-hand menu interface



Fig.22 modify mode

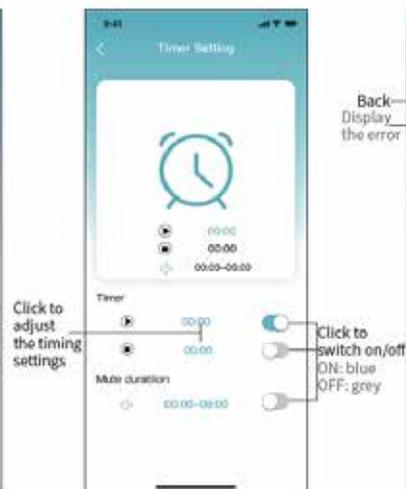


Fig.23 Timing Settings interface

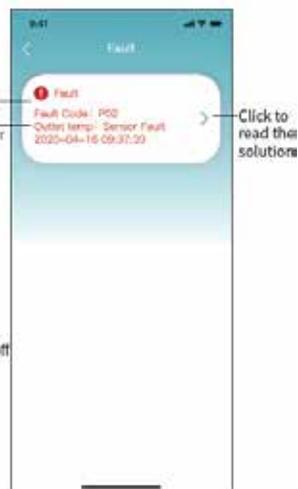


Fig. 24 Troubleshooting interface

ICON	NAME	FUNCTIONS
	ON/ OFF	Click it to turn on/ off the unit
	Silent Mode Off	Display silent mode off, click it to activate the silent mode
	Silent Mode On	Display silent mode on, click it to turn off the silent mode
	Mode shift	Mode changing: Cooling,Heating,Auto
	Cooling	Display Cooling mode, click it to change operating mode
	Heating	Display Heating mode, click it to change operating mode
	Auto	Display Auto mode, click it to change operating mode
	Timming settings	Click it to jump to the timer on/ off and mute timer setting interface
	Troubleshooting	Click it to jump to the troubleshooting interface

11. WARRANTY AGREEMENT

Definitions

- 1 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 Element, a thirty (30) 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

- (b) in the case of a Compressor,

- (i) a two (2) year limited warranty on Heatseeker NovaS models;

- (ii) a five (5) year limited warranty on Heatseeker NovaPro 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 that part of the Product.

- 4 The Automatic Controller included in the Product carries:

- (a) in the case of an AquaGen 5 Series of Automatic Controllers including Sensors, a three (3) year limited warranty. For spare parts and out of warranty repairs, a twelve (12) month warranty from Donteke Electronics Pty Ltd, 19 Melrich Road, Bayswater, Victoria, 3153 (Phone: (03) 9762 8800, Email: service@dontekelectronics.com.au); or

- (b) in the case of an Aqua-Gen 2 Series of Automatic Controllers including Sensors, a two (2) year limited warranty. For spare parts and out of warranty repairs, a twelve (12) month warranty from Donteke Electronics Pty Ltd, 19 Melrich Road, Bayswater, Victoria, 3153 (Phone: (03) 9762 8800, Email: service@dontekelectronics.com.au);

- (c) in the case of a VortexSwitch or VortexLink, a two (2) year limited warranty. For spare parts and out of warranty repairs, a twelve (12) month warranty from Donteke Electronics Pty Ltd, 19 Melrich Road, Bayswater, Victoria, 3153 (Phone: (03) 9762 8800, Email: service@dontekelectronics.com.au);

Labour, travel and freight costs incurred as a result of product failure are excluded from this warranty

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 a 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 some Capital City Metropolitan areas or within a 20km radius of an Authorised 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 installation, operating, cleaning or maintenance instructions;
 - (d) harsh or adverse Pool/Spa water conditions;
 - (e) installation, repair to or alteration of any product or parts of the system by any person who has not been authorised by Supreme Solar Pty Ltd to perform such an installation, 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.
 - (h) Any damage resulting from vermin infestation.
- 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:
 - (i) 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 products and/or 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 solar 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.



Supreme Heating

Heating Australian Pools For Over 30 Years.

1300 787 978

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