madi**mack**

*inver***FLOW**^{PRO}

INSTALLATION
MANUAL

Powered by **INVErmac** TECHNOLOGY

CONGRATULATIONS AND THANK YOU FOR PURCHASING OUR ELITE INVERTER POOL PUMPS InverFlow Series.
THIS MANUAL CONTAINS IMPORTANT INFORMATION THAT WILL HELP YOU IN OPERATING AND MAINTAINING THIS PRODUCT.

Adherence to the directions for use in this manual is extremely important for health and safety. Failure to strictly adhere to the requirements in this manual may result in personal injury, property damage and affect your ability to make a claim under the manufacturer's warranty provided with your product. Products must be used, installed and operated in accordance with this manual. You may not be able to claim on the manufacturer's warranty in the event that your product fault is due to failure to adhere this manual.

PLEASE READ THE MANUAL CAREFULLY BEFORE INSTALLATION & OPERATION AND RETAIN IT FOR FUTURE REFERENCE.

1. IMPORTANT SAFETY INSTRUCTIONS

This guide provides installation and operation instructions for this pump. If you have any other questions about this equipment, please consult your supplier.

1.1 When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

- RISK OF ELECTRICAL SHOCK.
  Pool pump must be installed on a RCD protected circuit. Check your local state regulations and wiring rules.
- This pump is for use with permanently installed in-ground or above-ground swimming pools and may also be used with hot tubs and spas with a water temperature under 50°C. Due to the fixed installation method, this pump is not suggested to be used on above-ground pools that can be readily disassembled for storage.
- The pump is not submersible.
- Never open the inside of the drive motor enclosure.

1.2 All installations must be fitted with earth leakage or residual current protection devices, having a rated residual operating current not exceeding 30mA.

- Fill the pump with water before starting. Do not run the pump dry. In case of dry run, mechanical seal will be damaged and the pump will start leaking.
- Before servicing the pump, switch OFF power to the pump by disconnecting the main circuit to the pump and release all pressure from pump and piping system.
- Never tighten or loosen screws while the pump is operating.
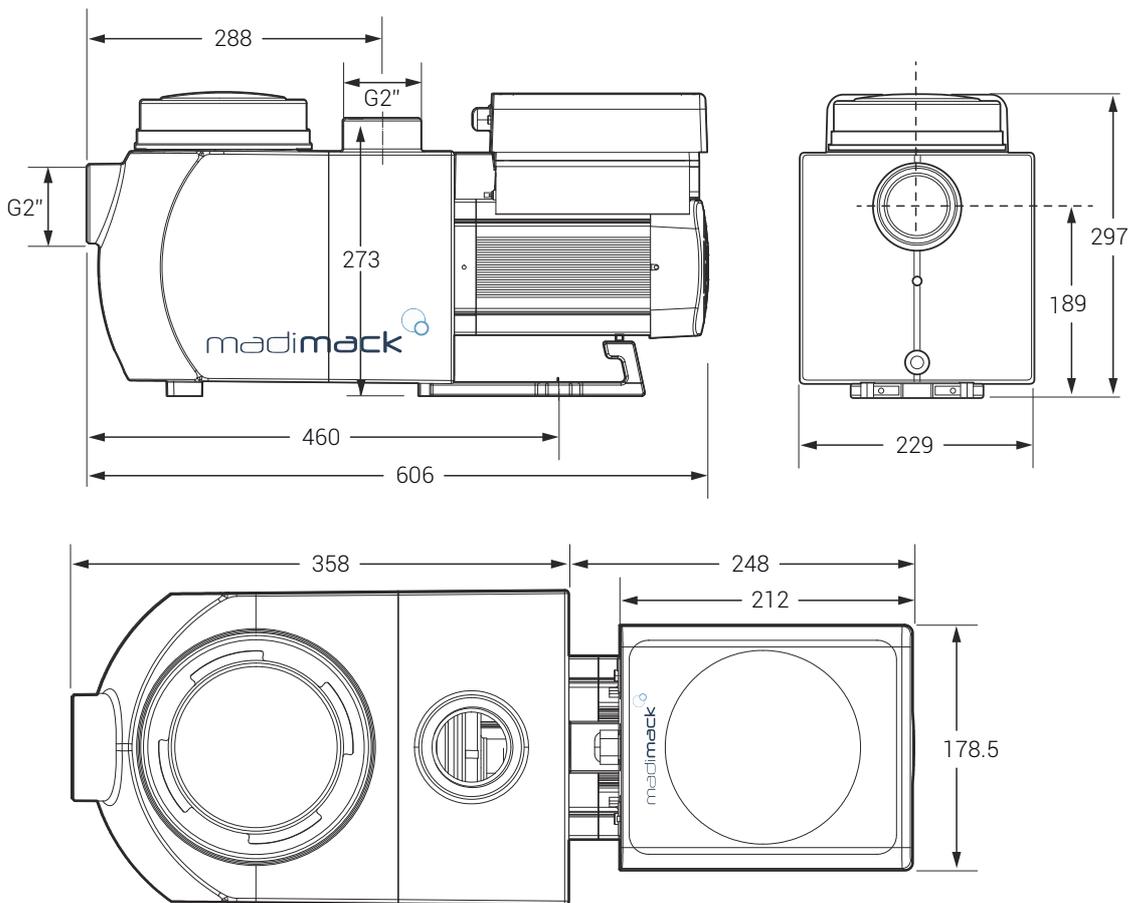- Ensure that the inlet and outlet of the pump are unblocked with foreign matter.

CONTENTS

2. TECHNICAL SPECIFICATIONS

| Model | Advised Pool Volume | INPUT POWER | | Voltage (V/Hz) | Max Flow (L /min) | Head Max (m) | Circulation | |
		Power KW	Power HP				Flow at 8m L/min	Flow at 10m L/min
INVPRO300	30~50	0.75	1.0	220~240 50/60	390	18	300	235
INVPRO400	40~70	1.05	1.5	220~240 50/60	433	20	384	322
INVPRO500	50~80	1.40	2.0	220~240 50/60	472	20.5	460	408

3. OVERALL DIMENSION (mm)

4. INSTALLATION

4.1. Tools required

Safety Goggles

Multi Grips

Pipe Wrench

Flathead Screwdriver

Philips Screwdriver

Gloves

Adjustable Wrench

Power Drill

PVC Pipe Cutter

Tape Measure
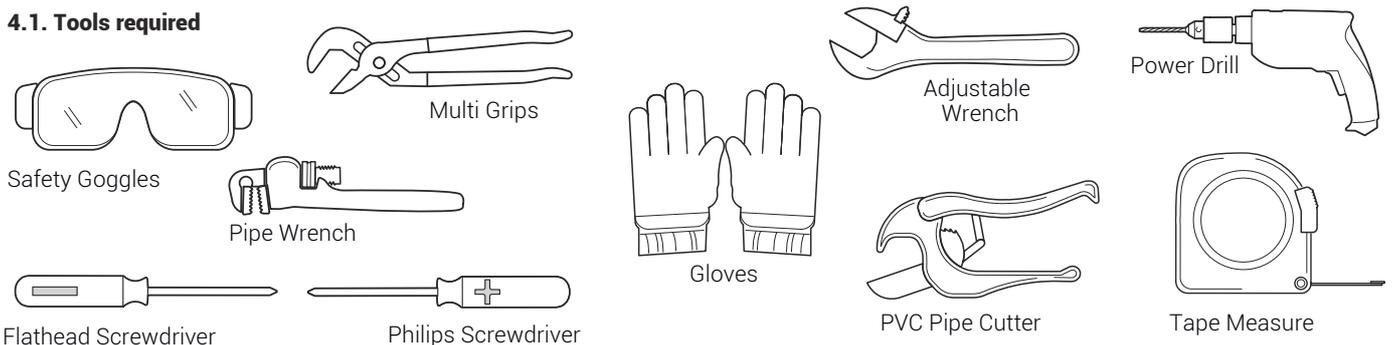
4.2. Pump Location

The pump should be installed in an area with at least 150mm distance around the unit away from any obstacles and away from any corrosive products.

1) Install the pump as close to the pool as possible, to reduce friction loss and improve efficiency, use short, direct suction and return piping.
2) To avoid direct sunshine, heat or rain, it is recommended to place the pump indoors or in the shade.
3) DO NOT install the pump in a damp or non-ventilated location. Keep pump and motor at least 150mm away from obstacles, pump motors require free circulation of air for cooling.
4) The pump should be installed horizontally and fixed in the hole on the support with screws to prevent unnecessary noise and vibration.

4.4. Valves and Fittings

It is recommended to install isolation valves on the suction and return lines for easier maintenance of the pool pump.

Any valves or fittings should not be withing 350mm of the pump, and check valves should be fitted with long pipework.

4.3. Piping

Suction and return connections on the pool pumps are 50mm pressure pipe dimensions.

1) For optimization of the pool plumbing, it is recommended to use a pipe with size of 50mm. When installing the inlet and outlet fittings (joints), use the special sealant for PVC material.
2) The dimension of suction line should be the same or larger than the inlet line diameter, to avoid pump sucking air, which will affect the efficiency of the pump.
3) Plumbing on the suction side of the pump should be as short as possible.
4) For most installations we recommend installing a valve on both the pump suction and return lines, which is more convenient for routine maintenance. However, we also recommend that are valve, elbow, or tee installed on the suction line should be no close to the front of the pump than seven times the suction line diameter
5) Pump outlet piping system should be equipped with a check valve to prevent the pump from the impact of medium recirculation and pump-stopping water hammer.

Return to pool 50mm

Elbow

350mm

Suction 50mm
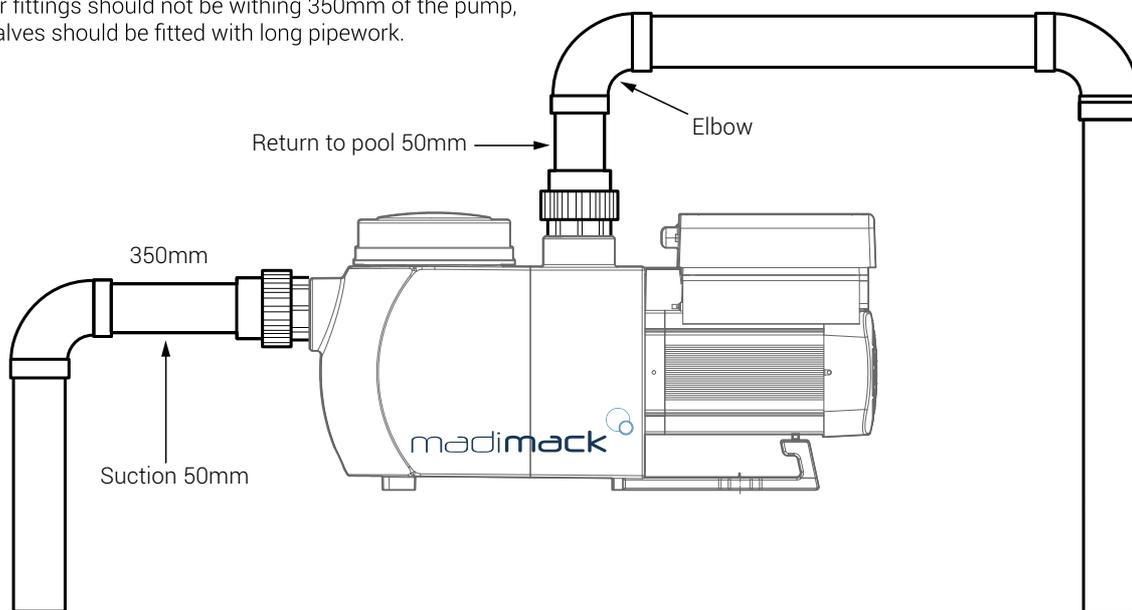
* The pump inlet/ outlet union size: optional with metric 50 or 40mm.
2) Below water level system should have an isolation valves installed on suction and return line for maintenance; however, the suction gate valve should be no closer than seven times the suction pipe diameter as described in this section.
3) A check valve shopuld be installed if there are long pipe runs aboave water level or if is significant height between the return line and the outlet of the pump.
4) Be sure to install check valves when plumbing in parallel with other pumps. This helps prevent reverse rotation of the impeller and motor.

4.5 Check before initial startup

1) Check whether pump shaft rotates freely;
2) Check whether power supply voltage and frequency conform to the nameplate;
3) Facing the fan blade, the direction of motor rotation should be clockwise;
4) It is forbidden to run the pump without water.

4.6 Application conditions

Ambient temperature	Indoor installation, temperature range: -10 ~ 42°C
Water temperature	5°C ~ 50°C
Salt pools	Salt concentration up to 0.5%, i.e. 5g/L
Humidity	≤ RH, (20 ± 2)
Altitude	Not exceed 1000m above sea level
Installation	The pump can be installed max. 2m above water level
Insulation	Class F, IP55

5. SETTING AND OPERATION

5.1 Display on control panel:
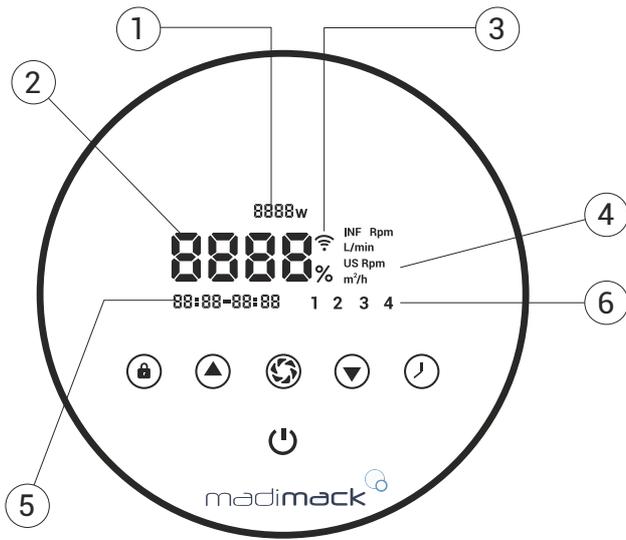
1	Power Consumption
2	Running capacity/ Flow rate
3	WIFI Indicator
4	Unit of flow
5	Timer period
6	Timer 1/2/3/4

🔒	**Unlock**	Hold down this button to unlock the screen.
🔆	Switch between Adaptive Mode and Manual Mode **Auto Inverter Mode:** The running capacity will be automatically adjusted between 30%-120% according to the preset flow rate. **Manual Inverter Mode:** The running capacity will be set manually between 30%-120%. The default mode is Adaptive mode.	
▲	**UP**	To change the value (capacity/flow/time).
▼	**DOWN**	
🕐	**Timer setting**	
⏻	**On/ Off**	

5.2 Startup
Before operation.
Fill the basket with water before starting up the pump.
When the power is switched on, the screen will fullu illuminate for 5 seconds, check whether power supply voltage and frequency conform to the nameplate;
Refer to section 4.4 before proceeding.

When the screen is locked, only the button 🔒 will light up;
Press and hold 🔒 for more than 3 seconds, other buttons will all light up. The screen will automatically lock up when there is no operation for more than 1 minute and the brightness of the screen is reduced by 1/3 of the normal display. Short press 🔒 to wake up the screen and observe the relevant operating parameters.

The default flow range for Madimack Inverflow Pro is as below:

Model	Default flow rate range
INVPRO300	80~320 L/min
INVPRO400	80~420 L/min
INVPRO500	80~520 L/min

5.3 Self- priming
When switched on for the first time after installation, the pump will start self-priming.

Self-priming:
When the pump performs self-priming, it will count down from 1500s and stop automatically when the system detects the pump is full of water, then the system will recheck for 120s again to make sure the self-priming is completed.

User can exit self-priming manually by pressing 🔒 for more than 3 seconds. The pump will enter the default Manual-Inverter mode at the initial startup. If the user exits the self-priming in the subsequent startup, the pump will return to the previous state before the last shutdown.

Remark:
The pump is delivered with self-priming enabled. Each time the pump restarts, it will perform self-priming automatically. The user can enter the parameter setting to disable the default self-priming function (**see 5.10**).

If the default self-priming function is disabled, and the pump has not been used for a long time, the water level in the strainer basket may drop. User can manually activate the self-priming function by pressing both 🔒 🔆 for 3 seconds, the adjustable period is from 600s to 1500s (default value is 600s). After the manual self-priming is completed, the pump will return to the previous state before activating the manual self-priming. If the pump has entered the Auto-Inverter mode previously, the pump will perform self-learning for 180s to redefine the adjustable flow range after the manual self-priming.
User can press 🔒 for more than 3 seconds to exit the manual self-priming, and the pump will run the same as the manual self-priming is completed.

5.4 Manual-Inverter Mode

1	🔒	Hold 🔒 for more than 3 seconds to unlock the screen.
2	⏻	Press ⏻ to start. The pump will run at 80% of the running capacity at the initial startup after the self-priming.
3	▲ ▼	Press ▲ or ▼ to set the running capacity between 30%~120%, each step by 5%. For the purpose of backwashing, users can set a high running capacity according to the size of filter.
4	🌀	Press 🌀 again to switch to Auto-Inverter mode.

Note:
When the pipeline pressure is too high, to maintain an adequate flow rate, user can set the running capacity to 105%-120%. The pump will run at a higher speed but will not exceed the rated power of each model. If the pump has reached the rated power at 105% and user continues to increase the running capacity, the display will return to 105% when the motor speed is stabilized.

5.5 Auto-Inverter Mode

Under Auto Inverter Mode, the pump can automatically detect the system pressure and adjust the speed of motor to reach the set flow.

1	🌀	Unlock the screen, press 🌀 to switch from the Manual-Inverter mode to Auto-Inverter mode.
2	▲ ▼	The flow rate could be adjusted, by pressing ▲ or ▼ with 20L/min for each step. For the purpose of backwashing, users can set a high flow rate according to the recommended flow rate of the filter.
3	▲ 🌀	The unit of flow rate could be changed to LPM, IMP GPM or US GPM, by pressing both ▲ 🌀 for 3 seconds (default is L/min).
4	🌀	Press 🌀 to switch to Manual-Inverter mode.

Self-learning:
When first switching to the Auto-Inverter mode manually or via external control or activating timer mode with flow rate setting, the system will perform the self-priming process (see 5.3) and then the self-learning process for 180s and redefine the adjustable flow range of the pump by detecting the pipeline pressure.
eg: the default adjustable flow range of Inverflow P300i is 80-420 L/min after self-learning, the range may be redefined to 100-320L/min. If the set flow is beyond the current adjustable range, the actual achievable flow rate will be displayed after the motor speed is stabilized.

Refer to page5 for the default adjustable flow range for InverFlow Pro.

Note:
After the first self-learning, the pump will redefine the adjustable flow range. The pipeline pressure will be recorded by the system after the pump runs at the set flow/capacity for 5 minutes without other ope-rations. During the pump running, if it is detected that the pipelin pressure changes beyond a certain range, the icon of % or L/min (or other flow units) symbol will flash for 5 minutes. If the change last for 5 minutes, the pump will perform a self-priming and self-learning process, and redefine the flow range accordingly.
After the redefinition of the flow range, the pump will automatically adjust the running capacity to reach the set flow.
User can set the time interval to trigger the self-leaning automatically in the parameter setting (see 5.10) to ensure the accuracy of the flow rate.

5.6 Timer mode

The pump's on/off and running capacity could be commanded by timer, which could be programmed daily as needed.

1	Enter timer setting by pressing ⏲.
2	Press ▲ or ▼ to set the local time.
3	Press ⏲ to confirm and move to time-1 setting
4	Press ▲ or ▼ to choose the desired running periods, running capacity or flow rate (when % icon is flashing, user can change to set the flow rate by pressing 🌀).
5	⏲ Repeat above steps to set other 3 timers.
6	⏲ Hold 3 seconds to save settings and active timer mode
7	▲ or ▼ Check 4 timers to make sure there is no invalid setting.

NOTE:
When timer mode is activated, if the set time period contains the current time, the pump will start running according to the set running capacity or flow rate. If the set time period does not contain the current time, the timer number ‹1 2 3 4› (or 1 or 2 or 3 or 4) that is about to start running will be displayed on the controller and flash, 88:88 – 88:88 will display the corresponding time period, indicating a successful timer setting.

All 4 time periods should be set in chronological order. Overlap setting of time will be considered as invalid, the pump will only run based on the previous valid setting. If all 4 time periods set by the timer are invalid, ‹--:-- --:--› and ‹1 2 3 4› will flash to remind the user, you can press ⏲ to reset the time period again to make sure they are valid.

During timer setting, if you want to return to the previous setting, hold both ▲ ▼ for 3 seconds. If you don't need to set all 4 timers, you can hold ⏲ for 3 seconds, the system will automatically save the current set value and activate the timer mode.

Users can exit the timer mode by pressing 🌀.

5.7 Skimmer Mode

The skimmer mode enables the pump to skim the water surface, prevents the debris from accumulating, and provides users with a cleaner pool.

Hold 🔒 and 🕐 to enter the preset interface of the skimmer mode, press ▲ or ▼ to view the 3 presets, the selected preset will be activated after 8s without operation. User can exit the skimmer mode without activating it by holding 🔒 and 🕐 in the preset interface.

At the skimmer duration, the controller will show the parameter of the preset, user can hold 🔒 to exit the skimmer duration each time. When the skimmer duration ends, the pump will return to the normal state for the user to operate.
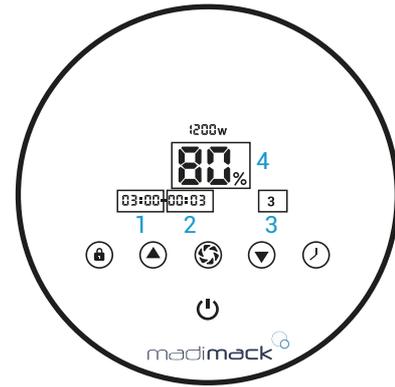
1. Skimmer cycle (hour)
2. Skimmer duration (minute)
3. Skimmer mode preset number
4. Skimmer speed
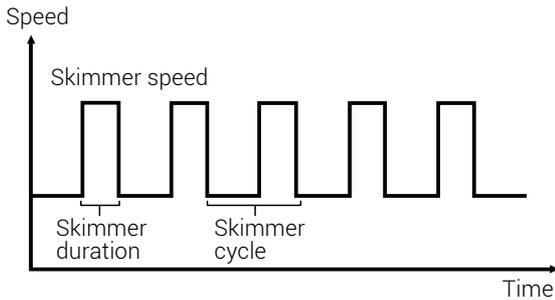
Preset	Skimmer cycle	Skimmer duration	Skimmer speed	Time period	Remarks
1	1h	3 min	100%	7:00 - 21:00	Editable in parameter setting
2	1h	10 min	100%	7:00 - 21:00	Not editable
3	3h	3 min	80%	7:00 - 21:00	Not editable

5.8 Speed Limit

User can set the speed limit of the running capacity to meet the flow requirement of other equipment such as sand filters.

Speed limit of the running capacity can be set from 60% - 100% in the parameter setting. (see 5.10). 100% means no speed limit and the running capacity can be set from 30% - 120% under normal operation.

To ensure the performance, the following mode or process will not be limited by the speed limit:

1. Self-priming at each start
2. Manual self-priming
3. Self-learning
4. Auto-Inverter mode
5. Flow rate setting in the timer mode

5.9 Parameter Setting

Restore factory setting.	Under off mode, hold both 🕐▲ for 3 seconds.
Check the software version.	Under off mode, hold both 🕐▼ for 3 seconds.
Manual priming.	Under on mode, hold both 🔒🌀 for 3 seconds.

Enter parameter setting as shown.	Under off mode, hold both ▲▼ for 3 seconds; If current address does no need to be adjusted, hold both ▲▼ or press 🔒 to next address.

Parameter Address	Description	Default Setting	Setting Range
1	Digital input 2	100% or 183L/min	Flow rate or 30~120%, by 5% increments
2	Digital input 3	80% or 183L/min	
3	Digital input 4	40% or 183L/min	
4	Self-priming/ Backwash capacity	100%	80~100%, by 5% increments
5	Control mode of Analog Input.	0	0: current control 1: voltage control
6	Enable or disable the priming that occurs at start.	25	25:enables 0:disables
7	Self-primming recheck time	2min	1-15min by 1min increments

Parameter Address	Description	Default Setting	Setting Range
8	System time	00:00	00:00 - 23:59
9	Preset 1 of the skimmer mode (skimmer cycle, skimmer duration, skimmer speed)	01:00 00:03 100%	Skimmer cycle: 1-24h, 1h for each step Skimmer duration: 1-30min, 1min for each Skimmer speed: 30%-100%, by 5% increments
10	Time period of the preset 1 of the skimmer mode	7:00- 21:00	Start time: 00:00-24:00 End time: 00:00-24:00
11	Speed limit	100%	60%-100%, by 5% increments, 100% means no speed limit
12	RS485 address	170 (0xAA)	160-190 (0xA0-0xBF), each step by 1.
13	automatically	0	self-learning automatically

6. EXTERNAL CONTROL

External control can be enabled via following contacts. If more than one external control is enabled, the priority is as below:
Digital Input >Analog Input > RS485 > Panel control

Connector location for Quick connect between Madimack
Pool Heat pump and other pump requirements (RS485, Digital inputs).

Relay output

AC power input

Connector for
external control

RELAY OUTPUT

AC POWER OUTPUT

ACL ACN PE

Brown L

Blue N

Yellow and Green
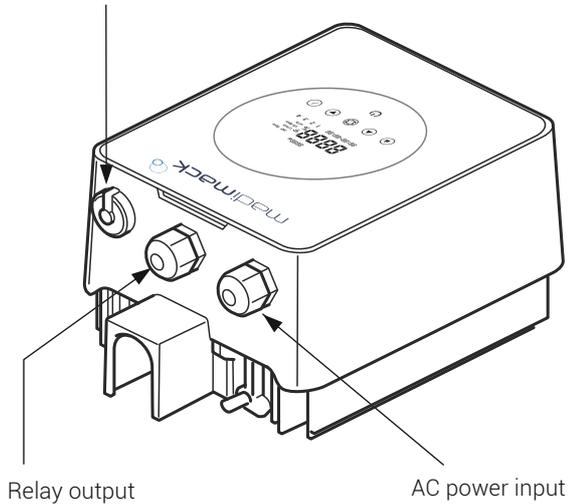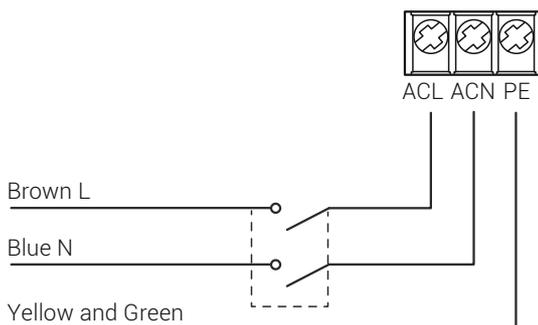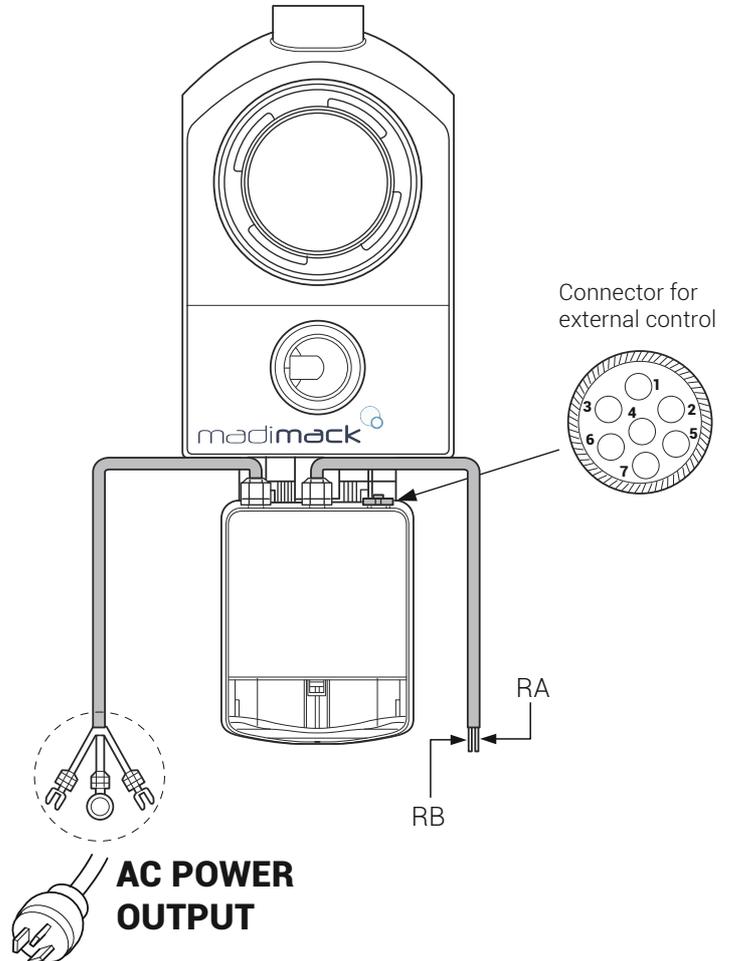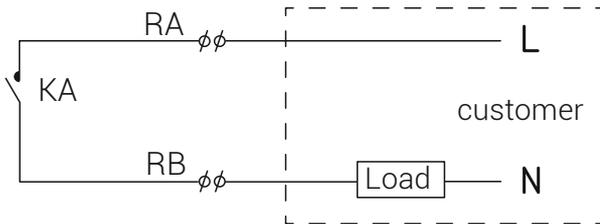
Name	Color	Description	Setting Range
PIN 1	Red	Digital Input 4	Flow rate and 30~120%, by 5% increments
PIN 2	Black	Digital Input 3	Flow rate and 30~120%, by 5% increments
PIN 3	White	Digital Input 2	Flow rate and 30~120%, by 5% increments
PIN 4	Grey	Digital Input 1	
PIN 5	Yellow	Digital Ground	
PIN 6	Green	RS485 A	
PIN 7	Brown	RS485 B	

Flow rate setting range:
INVPRO300: 83~333L/min
INVPRO400: 83~417L/min
INVPRO500: 83~500L/min

continue EXTERNAL CONTROL

a. Digital input

Running capacity is determined by the state of digital input, (5 pin)

When PIN4 connect with PIN5, the pump will be mandatory to stop; if disconnected, the digital controller will be invalid;

When PIN3 connect with PIN5, the pump will be mandatory to run at 100%; if disconnected, the control priority will be back on panel control;

When PIN2 connect with PIN5, the pump will be mandatory to run at 80%; if disconnected, the control priority will be back on panel control;

When PIN1 connect with PIN5, the pump will be mandatory to run at 40%; if disconnected, the control priority will be back on panel control;

The capacity of inputs (PIN1/PIN2/PIN3) could be modified according to the parameter setting..

b. RS485:

To connect with PIN6 and PIN7, the pump could be controlled via Modbus 485 communication protocol.

c. Relay output (optional):

Connect terminal L & N to enable external control. An additional on-off Relay is necessary while bearing power is greater than 500W (2.5A).

7. PROTECTION AND FAILURE

7.1 High Temperature Warning and Speed Reduction

In "Auto-Inverter/Manual-Inverter Mode" and "Timer mode" (except backwash/self-priming), when the pump control system reaches the high temperature warning trigger threshold (81°C), it enters the high temperature warning state; when the temperature drops from the high temperature warning release threshold (78°C), the high temperature warning state is released. The display area alternately displays AL01 and running speed or flow.

1) If AL01 displayed for the first time, the running capacity will be automatically reduced as below:

a. If current operating capacity is higher than 100%, the running capacity will be automatically reduced to 85%;

b. If current operating capacity is higher than 85%, the running capacity will be automatically reduced by 15%;

c. If current operating capacity is higher than 70%, the running capacity will be automatically reduced by 10%;

d. If current operating capacity is lower than 70%, the running capacity will be automatically reduced by 5%.

2) Suggestion for non-first displayed of AL01: check the module temperature every 2 minutes. Compared with the temperature in the previous period, for every 1-degree Celsius increase, the speed will decrease by 5%.

7.2 Undervoltage protection

When the device detects that the input voltage is less than 200V, the device will limit the current running speed

When input voltage is less than or equal to 180V, the running capacity will be limited to 70%;

When the input voltage range is within 180V ~ 190V, the running capacity will be limited to 75%;

When the input voltage range is within 190V ~ 200V, the running capacity will be limited to 85%.

7.3 Troubleshooting

Problem	Possible causes and solution
Pump does not start.	• Power Supply fault, disconnected or defective wiring. • Fuses blown or thermal overload open. • Check the rotation of the motor shaft for free movement and lack of obstruction. • Because of long time lying idle. Unplug the power supply and manually rotate motor rear shaft a few times with a screwdriver.
Pump does not prime.	• Make sure the pump basket is filled with water and the O-ring of cover is clean. • Loose connections on the suction side. • Strainer basket or skimmer basket loaded with debris. • Suction side clogged. • Distance between pump inlet and liquid level is higher than 2m, height of pump installation should be lowered.
Low Water Flow.	• Pump does not prime. • Air entering suction piping. • Basket full of debris. • Inadequate water level in pool.
Pump being noisy	• Air leak in suction piping, cavitation caused by restricted or undersized suction line or leak at any joint, low water level in pool, and restricted discharge return lines. • Vibration caused by improper installation, etc. • Damaged motor bearing or impeller (need to contact the supplier for repair).

7.4 Error code

When the device detects an error (except for the running capacity reduction strategy and 485 communication failure), it will power off automatically and display an error code. Errors can be sometimes caused by power surge or power interference and can be reset by powering down for 1min and restarting. I f error persist, contact your local dealer or service technician.

Item	Error Code	Description
1	E001	Abnormal input voltage
2	E002	Output over current
3	E003	No water Protection
4	E101	Heat sink over heat
5	E102	Heat sink sensor error
6	E103	Master driver board error
7	E104	Phase-deficient protection
8	E105	AC current sampling circuit failure
9	E106	DC abnormal voltage

Item	Error Code	Description
10	E107	PFC protection
11	E108	Motor power overload
12	E201	Circuit board error
13	E203	RTC time reading error
14	E204	Display Board EEPROM reading failure
15	E205	Communication Error
16	E208	Pressure sensor failure
17	E209	Loss of prime

Note:
1. When E002/E101/E103 is displayed, the device will resume working automatically, however when it appears a fourth time the device will stop working, to resume operation, unplug the device and plug in & restart again.

8. MAINTENANCE

Empty the strainer basket frequently. The basket should be inspected through the transparent lid and emptied when there is an evident stack of rubbish inside. The following instructions should be followed:
1). Disconnected the power supply.
2). Unscrew the strainer basket lid anti-clockwise and remove.
3). Lift up the strainer basket.
4). Empty the trapped refuse from the basket, rinse out the debris if necessary.

Note: Do not knock the plastic basket on a hard surface as it will cause damage

5). Inspect the basket for signs of damage, replace it.
6). Check the lid O-ring for stretching, tears, cracks or any other damage
7). Replace the lid, hand tightening is sufficient.

Note: Periodically inspect and clean the strainer basket will help prolong its life.

Lid Cleaning
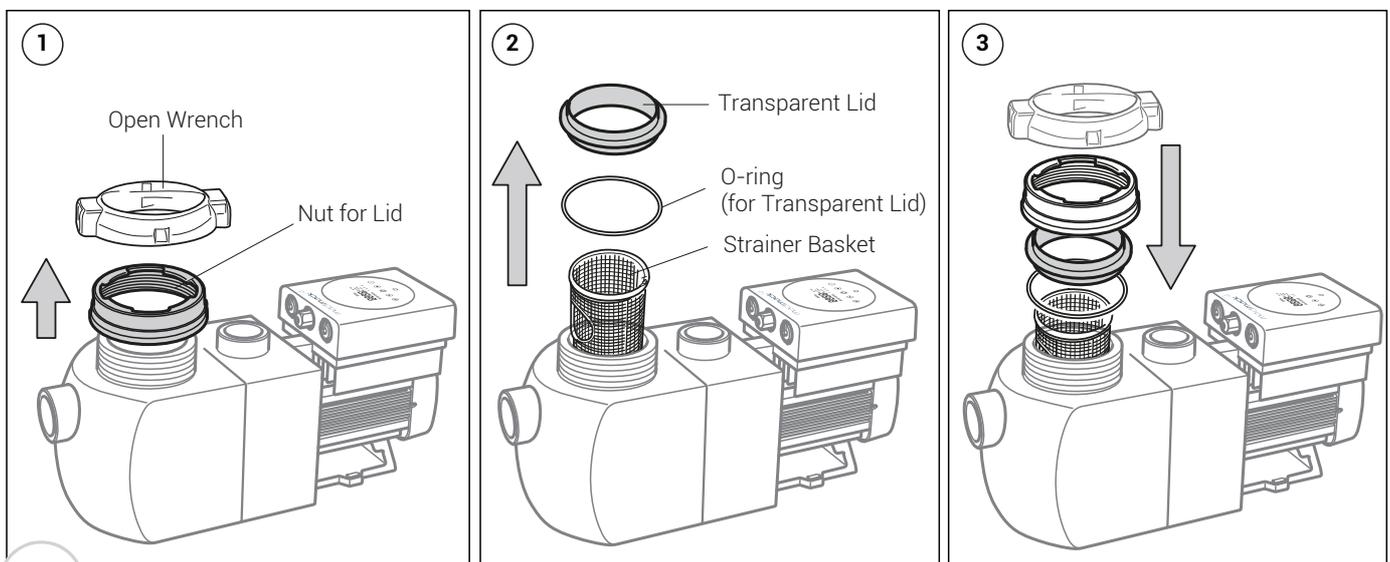
9. CONFIGURATIONS WITH HEATING SYSTEM

Configuration 1 (Separate heating system)

An onboard output initiates the circulation pump to start and stop from heat pump itself based on the temperature and timers.

For use when there are dedicated heating pipes and to separate from the filtration timers.

A Power outlet
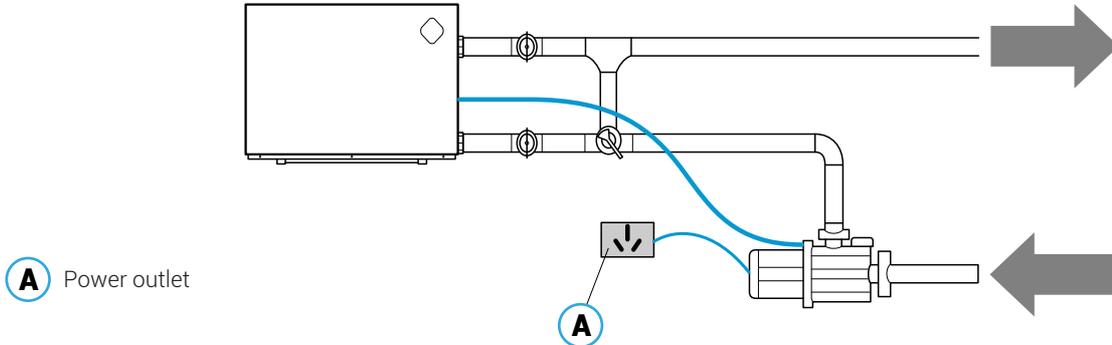
Use quick connect cable "pump output ELV" socket.
Pump is activated by heater timer and temperature.

Configuration 2 (Integrated system)

Power point

Quick connect

A Chlorinator

B Filter

C Water pump

D Sanitiser
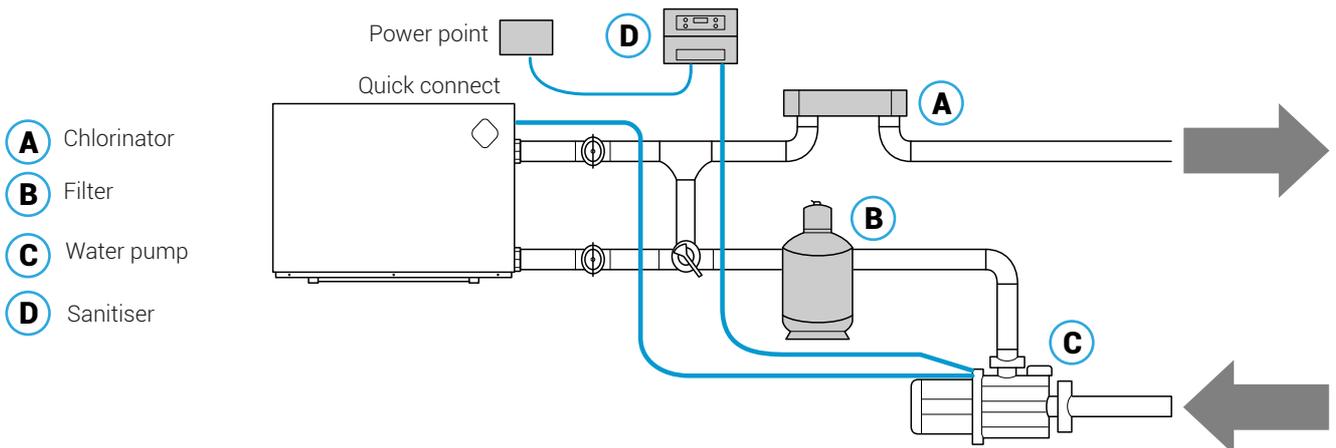
Plug water pump into sanitsation system.
Connect pump to heater with quick connect (Pump Output ELV).

Configuration 3 (Heater, integrated system and Pump Controller (MJBOX)

Power point

Heater

A Chlorinator

B Filter

C Water pump

D Pump controller

E Sanitiser
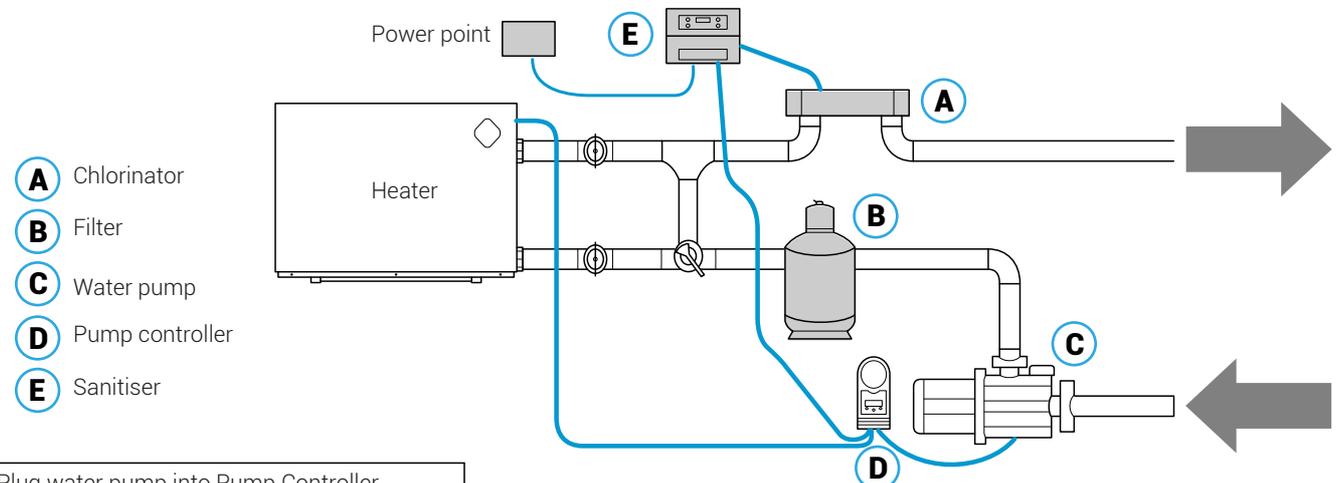
Plug water pump into Pump Controller.
Plug pump controller into Sanitisation.
Plug Quick connect from pump to controller.
Plug quick connect from heater to controller.

10. WIFI OPERATION

① InverFlow Download

Android"

Google play

iOS"

App Store

② Account registration
Register by email or third-party application

a. Email Registration

Register

Email Address

☐ I Agree User Agreement and Privacy Policy

Get Verification Code

Enter Verification Code

A verfication code has been sent your email 1249815078@qq.com Resend(53s)

Didn't get a code?

b. Third-party application registration

Register

Email Address

☐ I Agree User Agreement and Privacy Policy

Get Verification Code

Cancel ⌂ facebook.com AA ↻

facebook

Log in to your Facebook account connect to InverFlow

Mobile number or email address

Facebook password

Log in

Forgotten password?
Create account
Not now
Help Centre

English(UK)　日本语
Portuges(Brasil)　中文简体

Cancel ⌂ accounts.google.com AA ↻

Sign in with Google

Sign in
to continue to InverFlow

Email or phone

Forgot email?

To continue,Google will share your name,email address, language preference,and profile picture with InverFlow.

Create account　**Next**

English(United States)　Help privacy Terms

③ Create Home
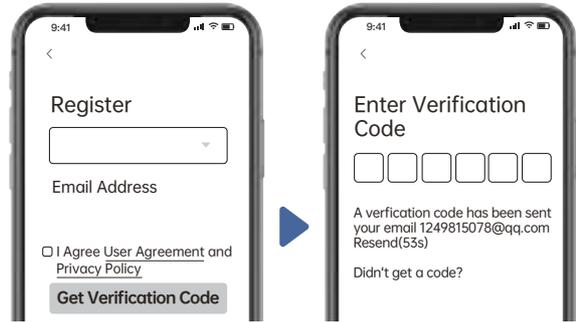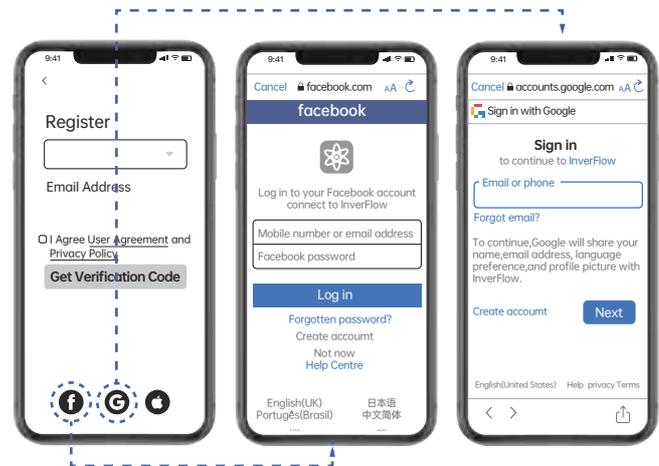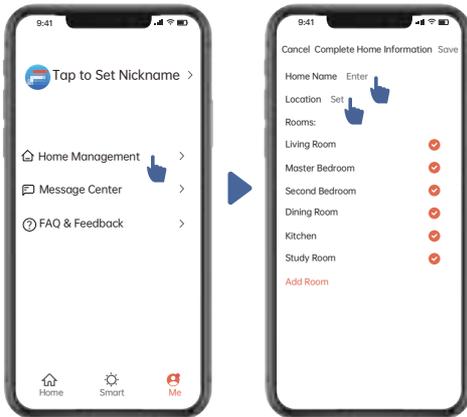Please set home name and choose the location of the device. (It is recommended to set the location so the weather can be shown in the App for your convenience).

Tap to Set Nickname >

⌂ Home Management >
💬 Message Center >
❓ FAQ & Feedback >

Home　Smart　Me

Cancel　Complete Home Information　Save

Home Name　Enter
Location　Set
Rooms:
Living Room　✓
Master Bedroom　✓
Second Bedroom　✓
Dining Room　✓
Kitchen　✓
Study Room　✓
Add Room

Room ▾

21℃

Poor　68.0%　1015.2hPa
Outdoor PM2.5 Outdoor Humid... Outdoor Air ...

All Devices　Living Room　•••

＋

NO devices

Add Devices

Home　Smart　Me

< Add Devices ⊡

● Searching for nearby devices. Make sure your device has entered pairing mode.

Discovering devices...

Add

Add Manually

Filtration Pool Pump

Cancel

Choose Wi-Fi and enter password

📶 ******

🔒 Password

Next

④ App pairing

Please make sure your pump is turned on before you start.

WiFi and Bluetooth

Pool pump WiFi only compatible with 2.4Ghz band and combined 2.4/5Ghz band.

1) Please ensure your phone is connected to the home WiFi and has a strong connection at the pool pump location. Also, please enable Bluetooth.

2) First, Unlock the screen by holding the Unlock button for 3seconds until a beep noise can be heard and the screen is illuminated.

3) Press ⏻ button, (for 5 seconds) until hearing a beep, then release and 📶 will flash.

4) Click "Add Device"
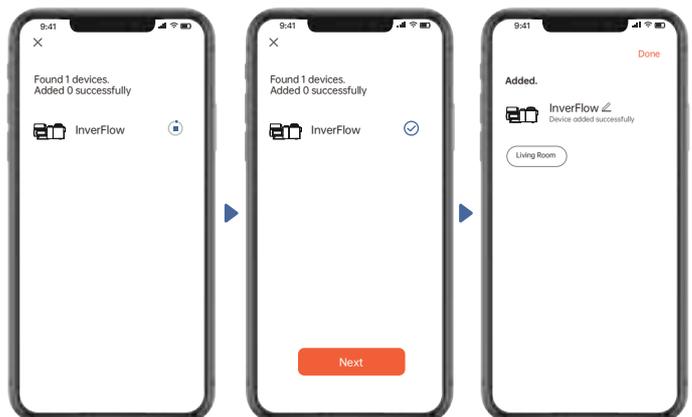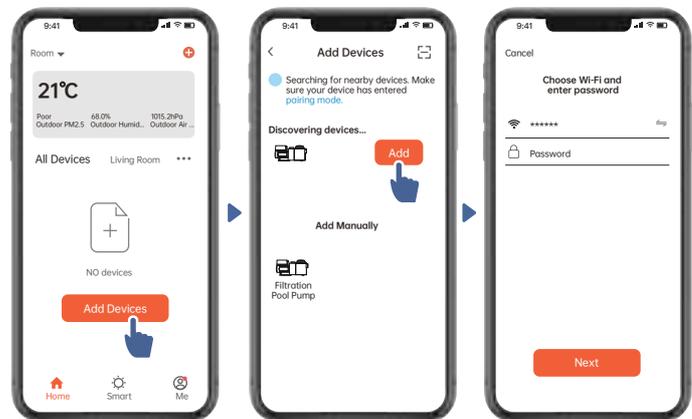
✕

Found 1 devices.
Added 0 successfully

InverFlow

✕

Found 1 devices.
Added 0 successfully

InverFlow ✓

Next

Done

Added.

InverFlow ✎
Device added successfully

Living Room

continue WIFI OPERATION

5 Operation

1) Using Auto Inverter mode:

Change flow rate units
Error code list

Real-time power consumption

Turn the control dial to set the flow rate

Auto Inverter mode

Timer

Data

On/off

2) Using Manual Inverter mode:

Real-time power consumption

Turn the control dial to set the running capacity

Manual Inverter mode

Timer

Data

On/off
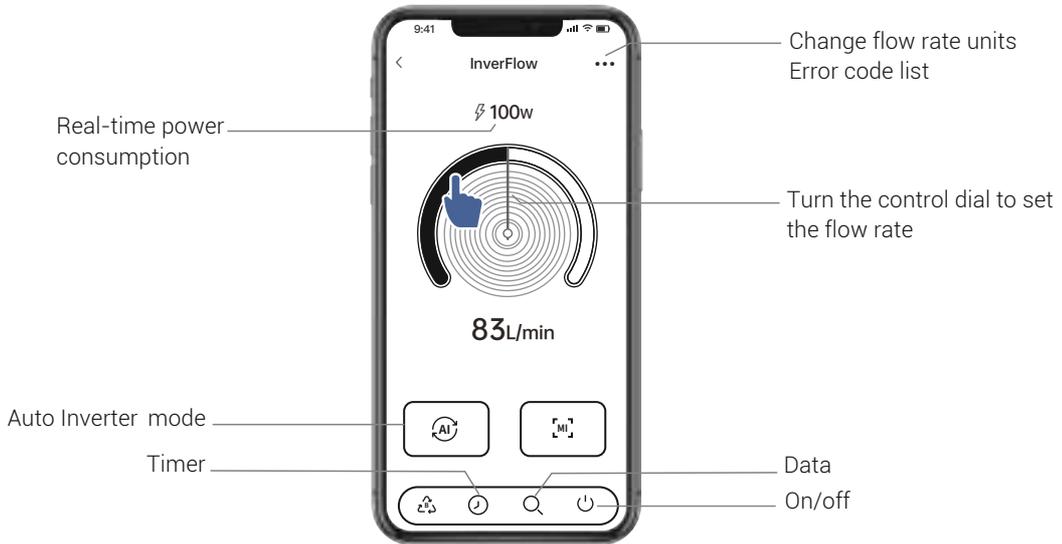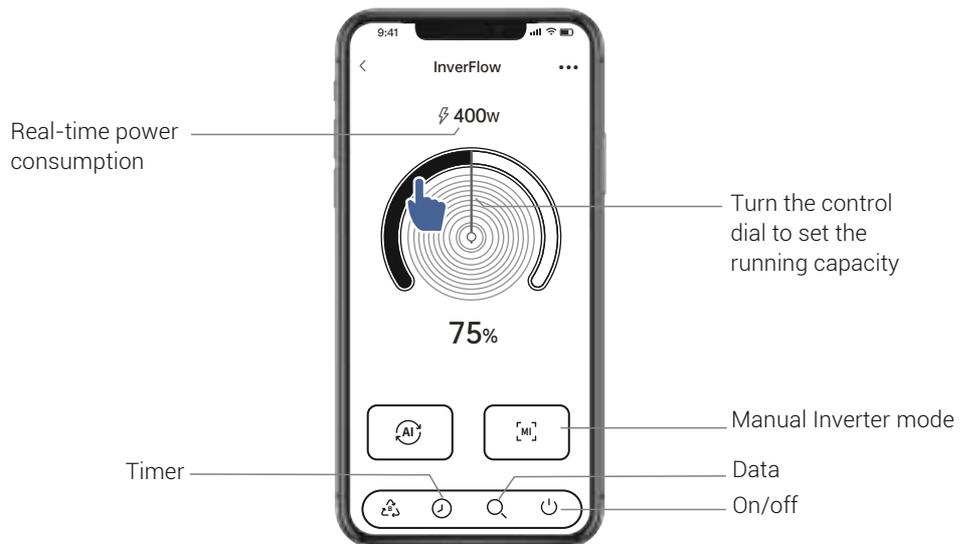
6 Sharing Devices with your family members

After pairing, if your family members also want to control the device, please let your family members register "InverFlow" first, and then the adminstrator can operate as below:

Screen 1:
9:41
< InverFlow ...
⚡ 400w
55%

Screen 2:
9:41
<
Device settings ✎ >
Flow rate units m³/h >
Error code list >

Screen 3:
9:41
<
InverFlow ✎ >
Device Information >
Tap-to-Run and Automation >
Device Offline Notification
Offline Notification ⊘
Other's
Share Device >
FAQ & Feedback >
Add to Home Screen >
Check Device Network Check Now >
Device Update No updates available >
Remove Device

Screen 4:
9:41
< Share Devive
When the device is connected the network,the person with whom you have shared the device may not be able to control the device.
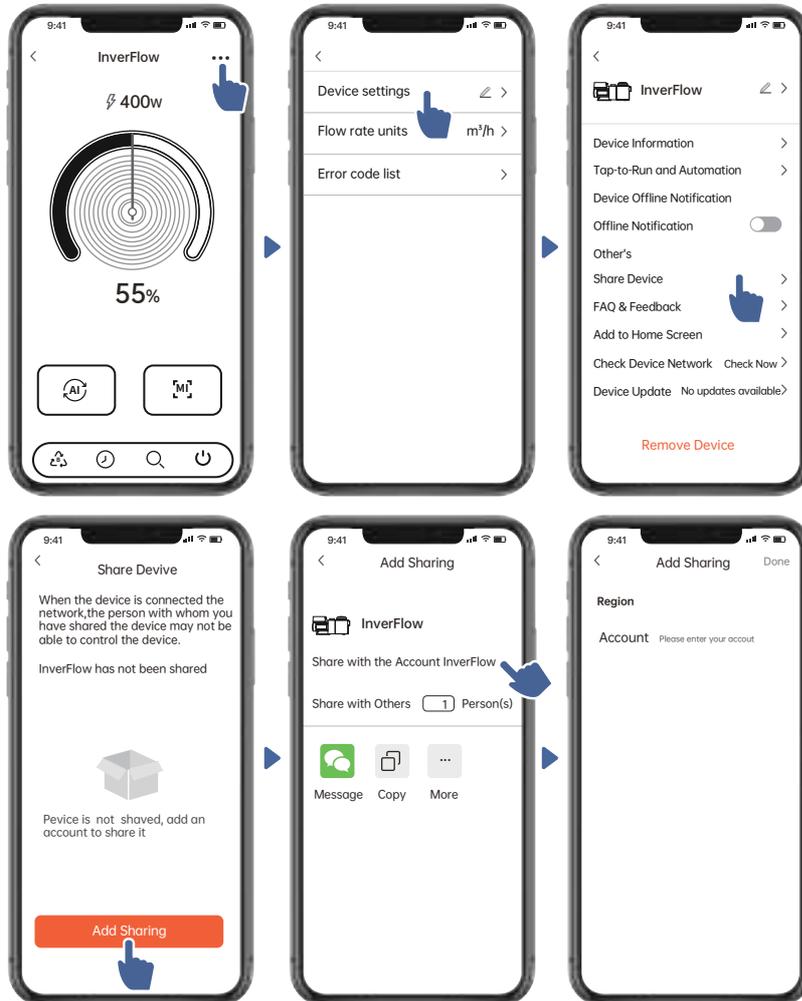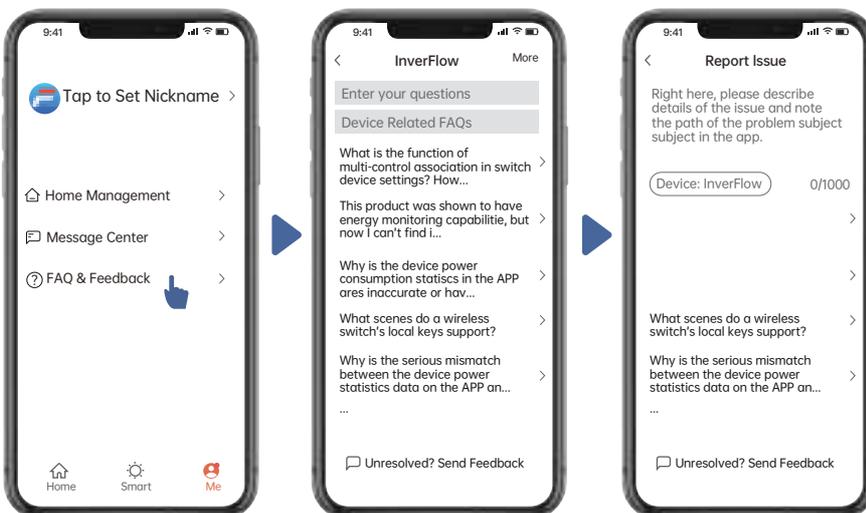
InverFlow has not been shared

Pevice is not shaved, add an account to share it
Add Sharing

Screen 5:
9:41
< Add Sharing
InverFlow
Share with the Account InverFlow
Share with Others [1] Person(s)
Message   Copy   More

Screen 6:
9:41
< Add Sharing Done
Region
Account Please enter your accout

7 Feedback

If you have any problem while using, welcome to send feedback.

Screen 1:
9:41
Tap to Set Nickname >
Home Management >
Message Center >
FAQ & Feedback >
Home Smart Me

Screen 2:
9:41
< InverFlow More
Enter your questions
Device Related FAQs
What is the function of multi-control association in switch device settings? How...
This product was shown to have energy monitoring capabilitie, but now I can't find i...
Why is the device power consumption statiscs in the APP ares inaccurate or hav...
What scenes do a wireless switch's local keys support?
Why is the serious mismatch between the device power statistics data on the APP an...
...
💬 Unresolved? Send Feedback

Screen 3:
9:41
< Report Issue
Right here, please describe details of the issue and note the path of the problem subject subject in the app.
Device: InverFlow 0/1000
>
>
What scenes do a wireless switch's local keys support?
>
Why is the serious mismatch between the device power statistics data on the APP an...
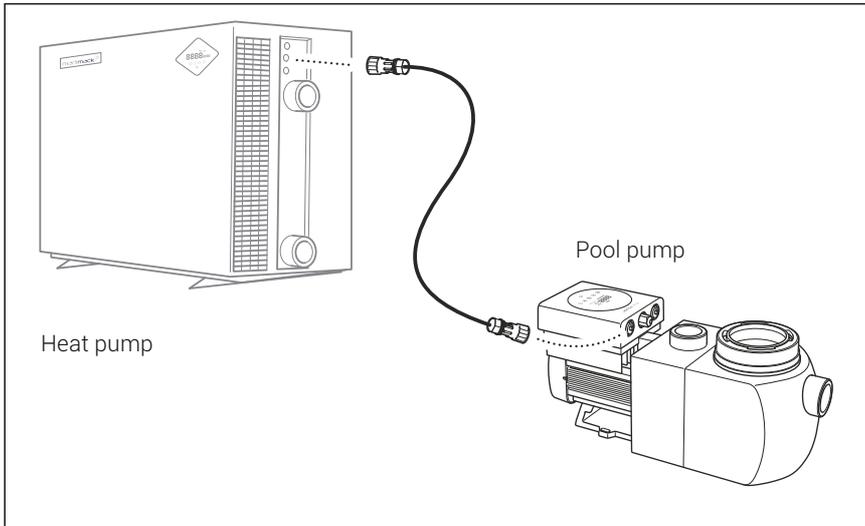...
💬 Unresolved? Send Feedback

Notice:
1) Weather forecast is just for reference;
2) The power consumption data is for reference only, as it may be affected by network problems and imprecision of the calculation.
3) App is subject to updates without notice.

11. CONNECTING TO MADIMACK HEAT PUMP POOL HEATER

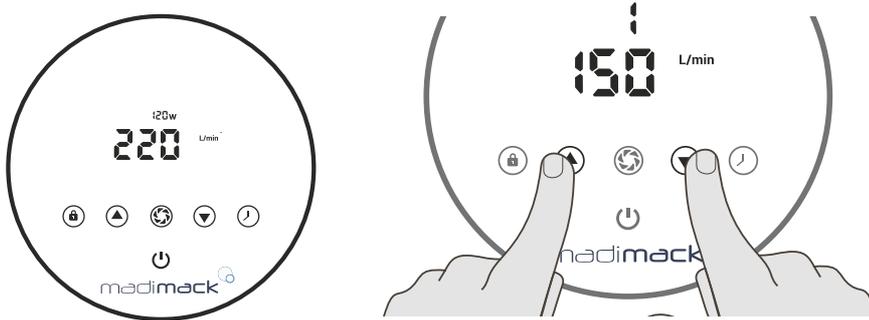**How to connect:** *Only available on late 2022 Madimack models.*

madimack

Socket
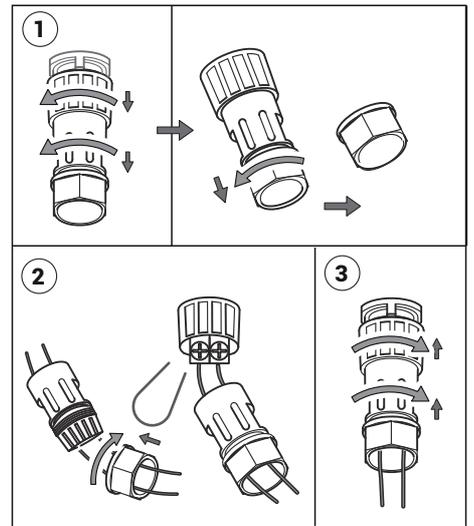
Adaptive Flow - Perfect Pairing with Madimack Pool Heat Pump

The Perfect Pairing uses the intelligent communicaiton functions of the pool heat pump to activate the speed required for the pool pump ensuring the most efficient solution for your pool and equipment.

1. Switch pump off with ⏻ so only power symbol is illuminated.

2. Press and hold ▲ and ▼ arrows for 4 seconds on until " ┇ " is displayed.

3. Use the ▲ or ▼ arrow whilst on " ┇ " to adjust to the bottom number (**L/min**) optimum stated on the table on the right side.

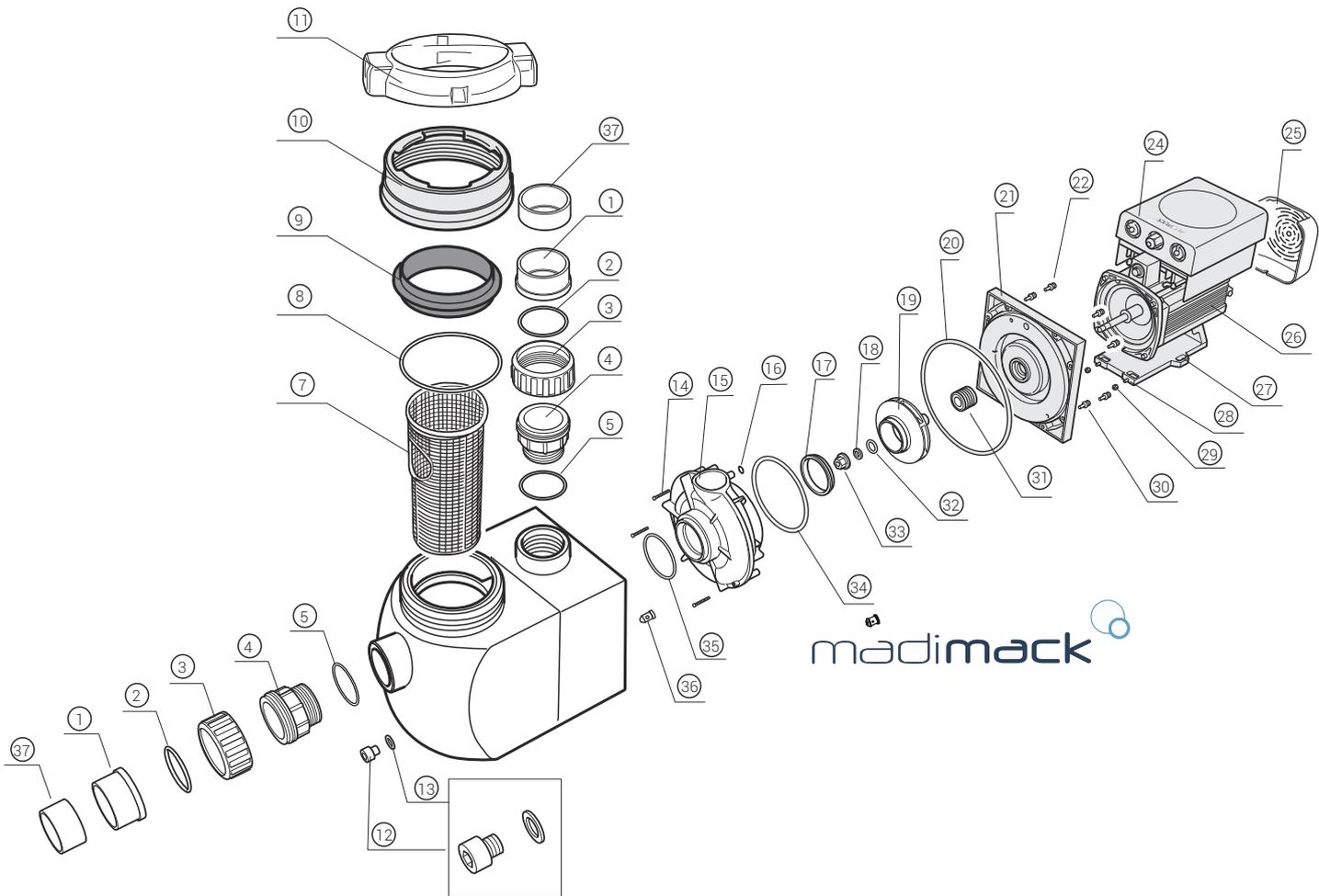| Pool Heater kW size	Optimum Flow rate L/min
9-16	83
17-20	100
21-24	133
25-28	150
29-32	183
33-36	200
37-40	283

CUSTOMIZED SOCKET

P1/P2:
Sticker "Pump Output E.L.V"

5/6 :
Sticker "Control Input"

Use the "Pump Output ELV" socket to connect to plug on water pump.

12. DIAGRAM

12.1 Exploded view

NO.	Name	QTY	NO.	Name	QTY	NO.	Name	QTY
1	T Union	2	13	O-ring (13.2x2.65mm)	1	25	Fan cover	4
2	O-ring (62x4.5mm)	2	14	Cross recess head screw	3	26	Motor	4
3	Union Nut	2	15	Volute	1	27	Base	1
4	Transition Joint	2	16	O-ring (8x1.8mm)	1	28	Cross recess head screw	2
5	O-Ring for Joint (56x5.3mm)	2	17	Turnable Ring	1	29	Hex Nut	2
6	Pumb Body	1	18	Spring Washer	1	30	Socket Head Cap Screw	8
7	Strainer Basket	1	19	Impeller	1	31	Mechanical Seal	1
8	O-ring for Transparent Lid (118x5.3mm)	1	20	O-ring for Seal Plate (204.5x4.5mm)	1	32	O-Ring (17x2.65mm)	1
						33	Nut for Impeller	1
9	Transparent Lid	1	21	Sealplate	1	34	O-Ring (125x3.55mm)	1
10	Nut for Lid	1	22	Pressure sensor	8	35	O-Ring (73x3.55mm)	1
11	Open Wrench	1	23	Washer	8	36	Rubber Plug	1
12	Drain Plug	1	24	Inverter controller	1	37	Reducing bushing	2

13. WARRANTY & EXCLUSIONS

STANDARD CONDITIONS - Australia and New Zealand

Madimack Pty Ltd distributes pool products and provides the following warranties:

STATUTORY RIGHTS

The benefits to the consumer under this warranty are in addition to other rights and remedies of the consumer under the laws in relation to the goods and services to which the warranty relates.

Our goods come with guarantees that cannot be excluded under Australian Consumer Law. You may be entitled to a replacement or refund for a major failure and compensation for any other loss or damage. You are also entitled to have the goods repaired if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

LIMITED WARRANTY

Madimack warrants that its products are free from defects in materials and manufacture for a period of 4 years from the date of purchase, unless otherwise specified.
Please visit **www.madimack.com.au** for all warranty terms and conditions

Madimack will, at its discretion, repair or replace any product proven to be defective during the warranty period for either materials or manufacture. Alternatively, Madimack will pay the cost of repair or replacement within 90 days of receiving the defective product, subject to unforeseen delays. This warranty is applicable for domestic installations only, is personal to the original purchaser, and does not transfer to any subsequent purchasers.

EXCLUSIONS

To the extent permitted by law, Madimack excludes all statutory or implied conditions and warranties, as well as any other liability that may arise under statute or at law, including without limitation liability for breach of contract, negligence, or any other cause of action. The following exclusions apply:

- Incorrect installation or operation of the unit resulting from failure to follow the provided instructions.
- Damage caused to the due to misuse or any means other than a manufacturer defect.
- Repairs or servicing performed by unauthorized dealers or service stations.
- Damage caused by an unauthorized service station repairs.
- Faults in the machine's operation caused by the use of non-specified accessories.
- General wear and tear of consumable items.

LIMITATION OF LIABILITY

To the extent permitted by law, Madimack's liability under any condition or warranty that cannot be legally excluded in relation to the supply of goods and services is limited to one of the following options:

Repairing the goods.
Replacing the goods with equivalent products or services.
Paying the cost of replacing the goods or providing equivalent products or services again.
Paying the costs of repairing the goods.

PROCEDURE FOR WARRANTY CLAIMS
Making a claim
The following steps should be taken when making a warranty claim with Madimack Pty Ltd.
1) Owners experiencing issues with their system are to contact Madimack Pty Ltd service departments online portal to and provide the requested information. www.madimack.com.au
2) A service agent will review the provided information and will contact you on the provided phone number to try and solve the issue.
3) If the issue cannot be dealt with over the phone, owners will be supplied with details of service agent in their area
4) Owners will need to contact and deal with service agents directly in relation to the booking in and payments of works related to the service or repair of their Madimack Pool Heat Pump
5) Owners can claim reimbursement for costs of works covered under the product warranty when completed by an approved Madimack Service Agent. When making a claim, owners will need to provide the following documents.
- Proof that you are the original system owner – original invoice showing owner name and property address.
- Copy of invoice from an approved Madimack approved service agent.
- For a major defect a copy of the report for major defects from approved Madimack Service agent.

In the event of a warranty claim, the faulty product should be returned to the place of purchase or, to an authorised service and warranty agent repair centre.

You are responsible for arranging the removal of the defective product and the installation of the repaired or replacement product. This includes all transportation costs and any applicable insurance fees associated with transporting the products to the supplier and the replaced or repaired product from the supplier.

All returns require Madimack's written approval and must be accompanied by either:

A service support ticket authorized by Customer Service Manager or Authorised Agent, or
A "Return Goods Authorisation"

14. DISPOSAL

Observe all safety and warning information during installation and operation.

13.1 DISPOSAL CONSIDERATIONS

The transport and protective packaging has been selected from materials which are environmentally friendly for disposal, and can normally be recycled.

Recycling the packaging reduces the use of raw materials in the manufacturing process and also reduces the amount of waste in landfill sites. Ensure that any plastic wrappings, bags etc. are disposed of safely and kept out of the reach of babies and young children. Danger of suffocation.

13.2 DISPOSING OF YOUR ELECTRICAL PRODUCT

Electrical devices marked with this label may not be disposed of in domestic waste at the end of their service life.

Electrical and electronic appliances often contain valuable materials. They also contain specific materials, compounds and components, which were essential for their correct function and safety. These could be hazardous to human health and to the environment if disposed of with your domestic waste or if handled incorrectly. Please do not, therefore, dispose of your old appliance with your household waste.

Please dispose of those materials by contacting your local authorities and ask for the correct method of disposal. Please ensure that your old appliance poses no risk to children while being stored prior to disposal.

By disposing of this product in accordance with the regulations, you protect the environment and the health of those around you from negative consequences.