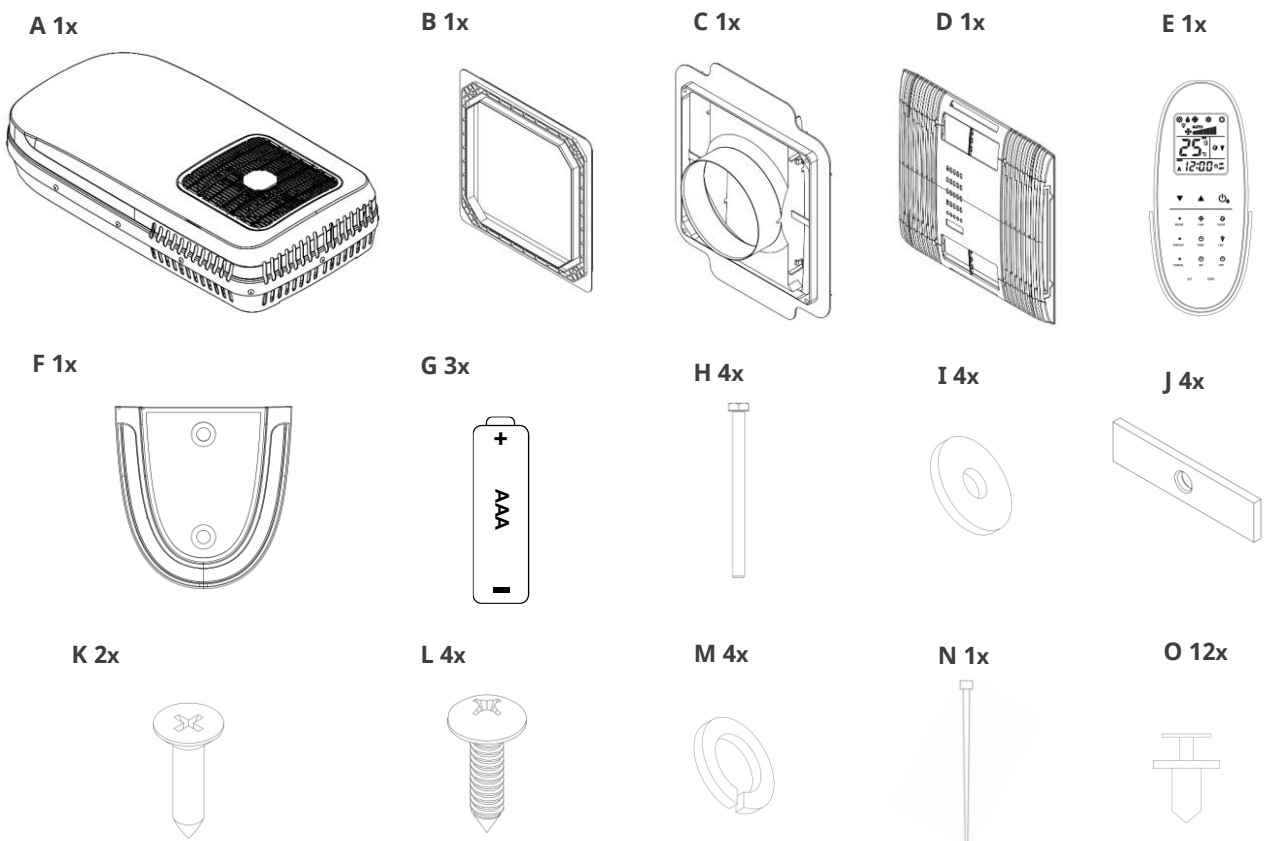


K2400

K2400 is a powerful aerodynamic air conditioner designed for installation on the roof of a caravan or recreational vehicle to provide reverse cycle heating and cooling. It is intended for roofs with a thickness of 23 to 55 mm. This air conditioner must be installed so that it is within $\pm 10^\circ$ of the horizontal plane. It will require ventilation around the air conditioner to work as attended. This product will not work properly if exposed to strong vibrations. This product is only suitable for the intended purpose with a minimum ambient temperature -5°C heating and maximum ambient temperature 50°C cooling within accordance of these instructions. This manual provides information that is necessary for proper installation and operation of the product. wrongly installation, improper operating or maintenance will result in unsatisfactory performance and a possible failure. The manufacturer accepts no liability for any injury or damage to the product resulting from; incorrect assembly or connection, including excess voltage, incorrect maintenance or use of spare parts other than original spare parts provided by the manufacturer alterations to the product without express permission from the manufacturer, use for purposes other than those described in this manual. We reserve the right to change the product appearance and product specifications.

COMPONENTS



A: Main unit **B:** Roof Base Bracket **C:** Mounting frame **D:** Plenum unit **E:** Remote control **F:** Remote control bracket **G:** AAA battery **H:** M8x110 bolt **I:** M8x28x3 washer **J:** Plate washer **K:** ST M3.9x16 **L:** ST M4x16 **M:** Spring washer **N:** Zip tie **O:** Spare Fastener Clip

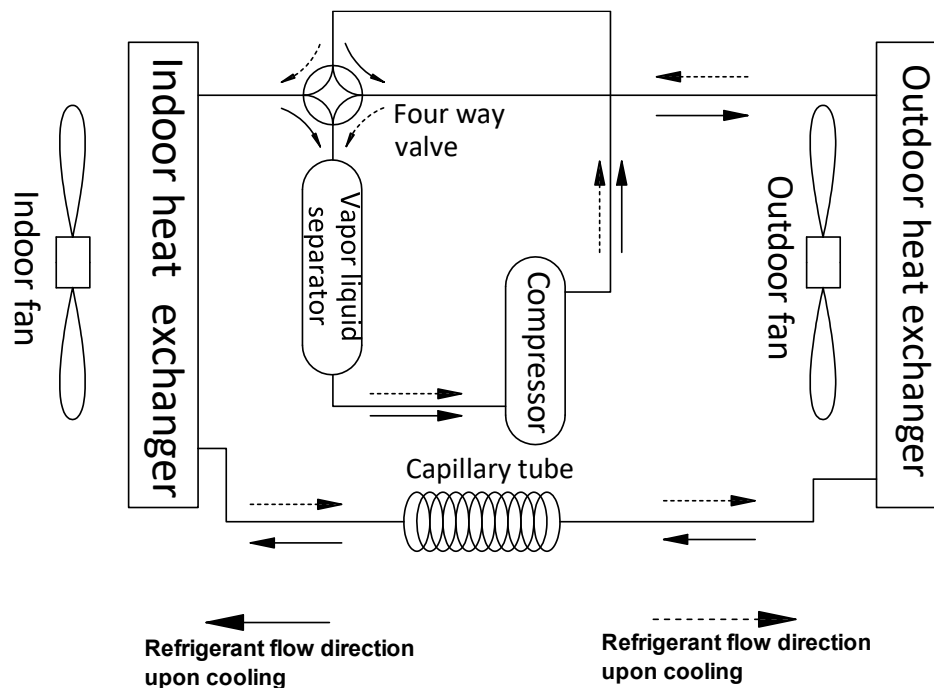
SAFETY INSTRUCTIONS

- It is important to read this manual before starting the installation process.
- Using, installing, or maintain this product in any other way than described in this manual may cause damage that voids the warranty.
- Do not use the product in very dusty environment.
- Never let children or persons with reduced sensory- physical- or mental capabilities or the lack of experience and knowledge, if they are not supervised or instructed concerning use of the appliance in a safe way and understand the hazards involved.
- Children shall not play with the appliance Cleaning and user maintenance shall not be performed by children without supervision.
- Only use the device as intended.
- Do not make any alterations or conversions to the device.
- Installation, maintenance and repairs of the roof air conditioner may only be carried out by qualified personnel who are familiar with the risks involved when handling refrigerant and air conditioning systems as well as the relevant regulations. Inadequate repairs may cause serious hazards.
- For repair service, please contact the dealer where you bought the product.
- Do not use the device near flammable fluids or in closed rooms.
- Make sure no combustible objects are stored or installed near the air outlet. A distance of at least 50 mm must be kept.
- Do not reach into air outlets or insert any foreign objects in the roof air conditioner.
- Do not undo the upper cover of the roof air conditioner in the event of a fire. Use approved extinguishing agents instead.
- It is highly recommended to test the product for at least 1 hour before use, such as during a vacation, to ensure proper functionality and provide time for any necessary repairs by a technician.
- If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons to avoid a hazard.
- Never drive through automatic car washes when the roof air conditioner is mounted.
- Please ask your vehicle manufacturer if a technical inspection is required after fitting an air conditioner and whether the height entered in your vehicle documents needs to be altered.
- If faults occur in the roof air conditioner's refrigerant circuit, the roof air conditioner must be checked by a specialist company and properly repaired. The refrigerant must never be released into the air Always disconnect the power supply when working on the device.
- The product is not suitable for use in agricultural or construction vehicles.
- Operate the device only if you are certain that the housing and the cables are undamaged.
- There may be wires between the roof and the ceiling. When cutting into the roof, make sure the power is disconnected to prevent any hazards.
- Do not exceed the rated BTU due to improper effect from the product and can overload the system over time. Please reach out to the manufacturer of the vehicle regarding the units BTU rating.
- The product can produce condensation any damage caused by this is not covered by warranty.

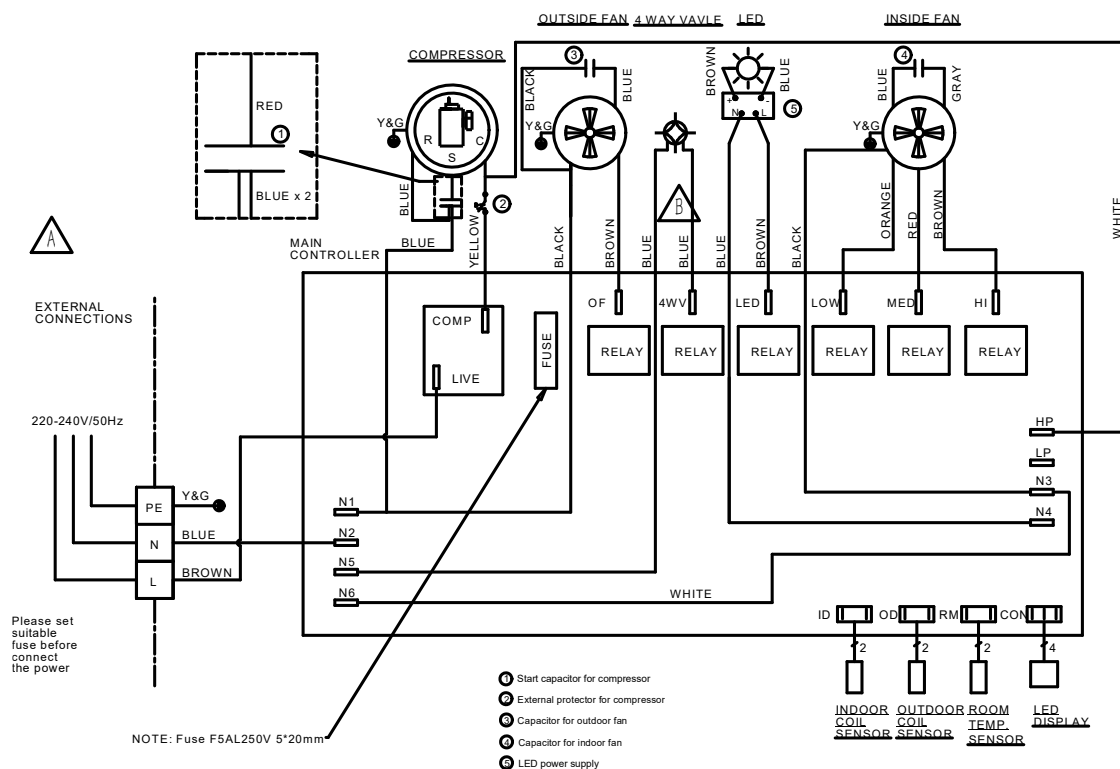
SPECIFICATIONS

Rated input voltage	220~240V/50Hz
Refrigerant R32	450g
Rated cooling capacity	2400 W
Rated heating capacity	2400 W
Input power for cooling	940 W
Input power for heating	850 W
Rated current for cooling	4.1 A
Rated current for heating	3.7 A
Maximum input power	1170 W
Rated BTU for cooling & heating	~8200 BTU
Maximum current	5.1 A
Rated pressure	1900 - 4300 KPa
Maximum operation pressure	3400 KPa
Maximum air flow	102 L/s
Installed weight	33kg
Minimum ambient temperature heating	-5°C
Maximum ambient temperature cooling	50°C
Main unit dimension LxWxH	1079x567x244 mm
Plenum unit dimension LxWxH	536x540x40 mm
Plenum Net weight	3,8kg
Plenum Gross Weight	5,6kg
A/C net weight	29,4kg
A/C unit gross weight	33,9kg

OPERATION PRINCIPLE

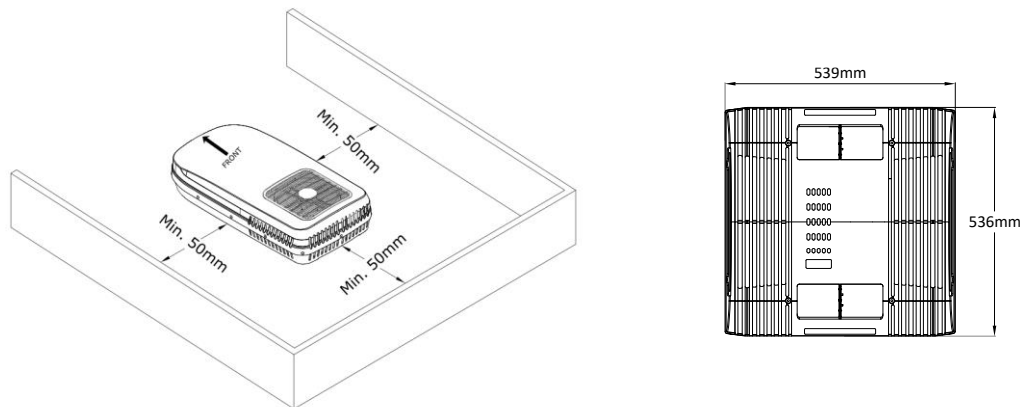


WIRE DIAGRAM

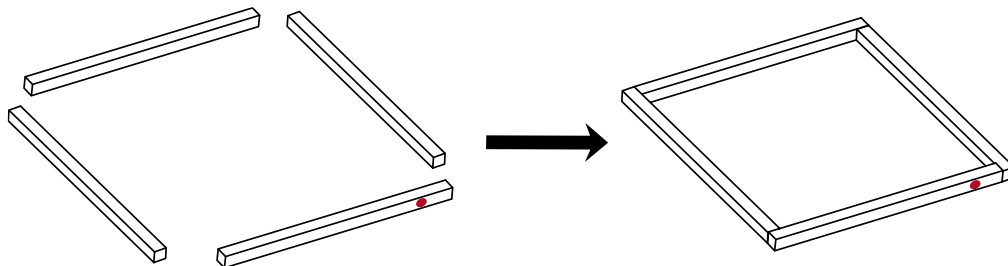


INSTALLATION - PREPARATION

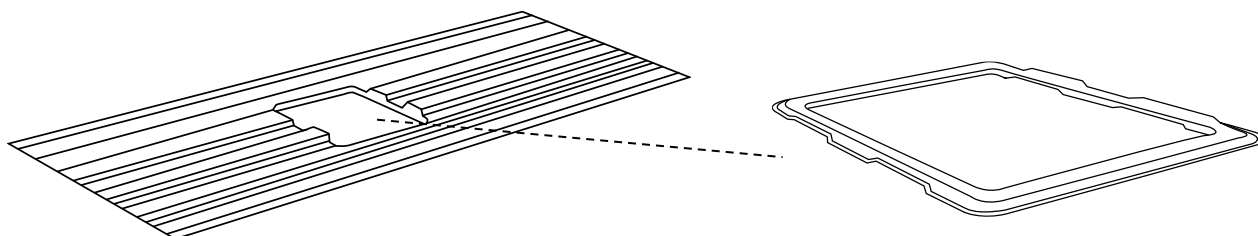
To ensure safe and correct installation of the product please ensure to check all the following steps. The Roof must be strong enough to support the weight of the installed unit. Ensure the roof also can support the weight of person(s) when installing the product. If there are any doubts do not continue before contacting the manufacturer of the vehicle for their confirmation. Check if there is enough available space for the unit to be installed. This is required for both the outside unit and inside panel.



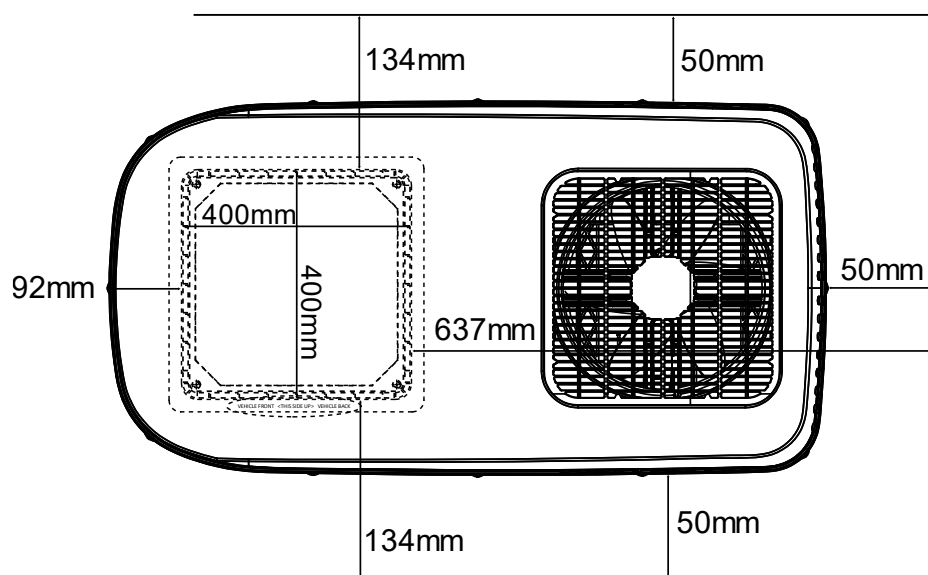
If the roof does not have an existing hole, one must be cut. Ensure to follow the guidance from the manufacturer of the vehicle to avoid any hazards. The hole must be 400x400mm. Some vehicles will need a support frame. Please consider this before cutting the hole and ensure the support frame has an opening through the frame for power supply wiring.



Some vehicles have corrugated roofs. This will require a specific gasket which is not included in the package. Please reach out to the manufacturer of the vehicle for parts.

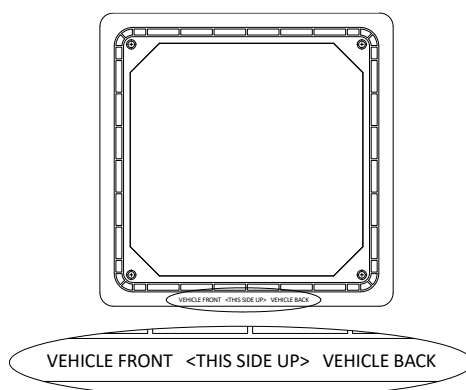


Please see below drawing for minimum space requirement for the installation

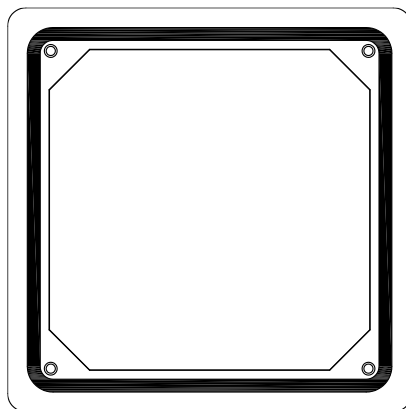


INSTALLATION

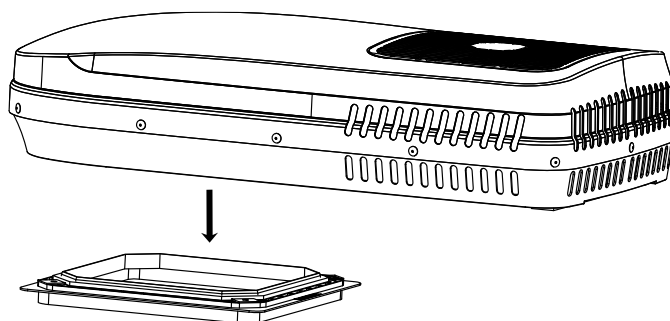
- 1) Place the Roof Base Bracket correctly according to the writings.
(Part(s) used: **B**)



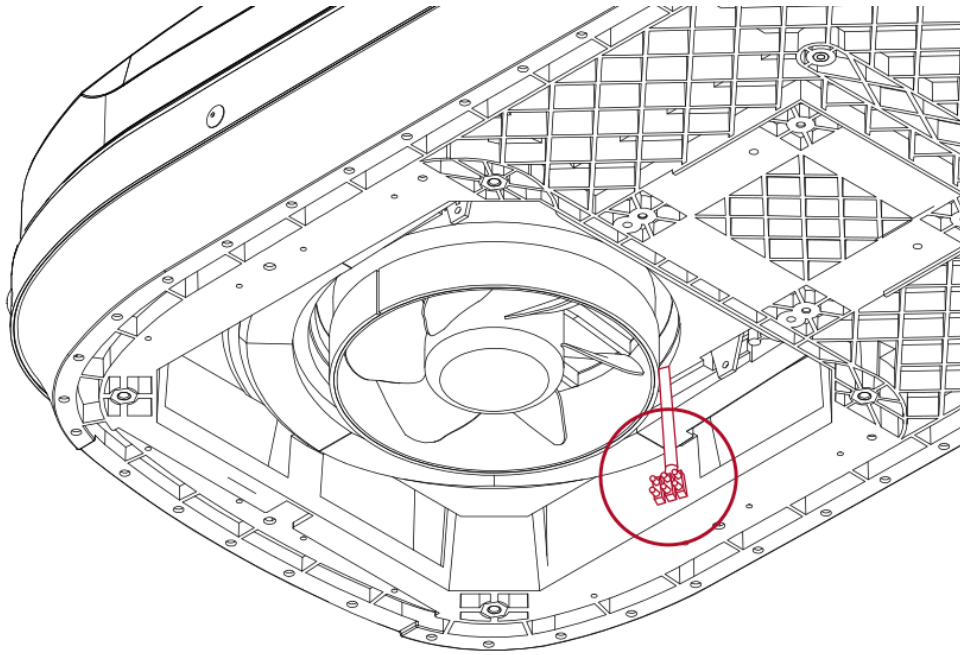
- 2)** On the back of the Roof Base Bracket, the side against the roof, apply silicon with a width of 10-12mm.



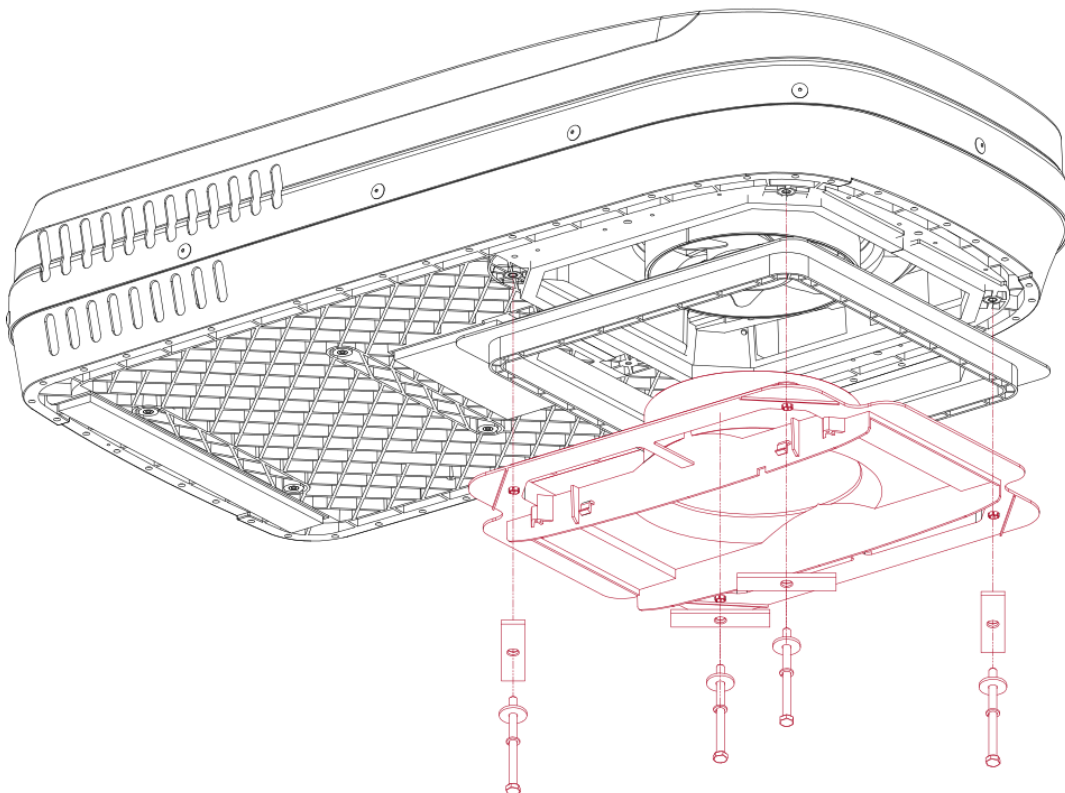
- 3)** Place the Main Unit onto the Roof Base Bracket. (Part(s) used: **A**)



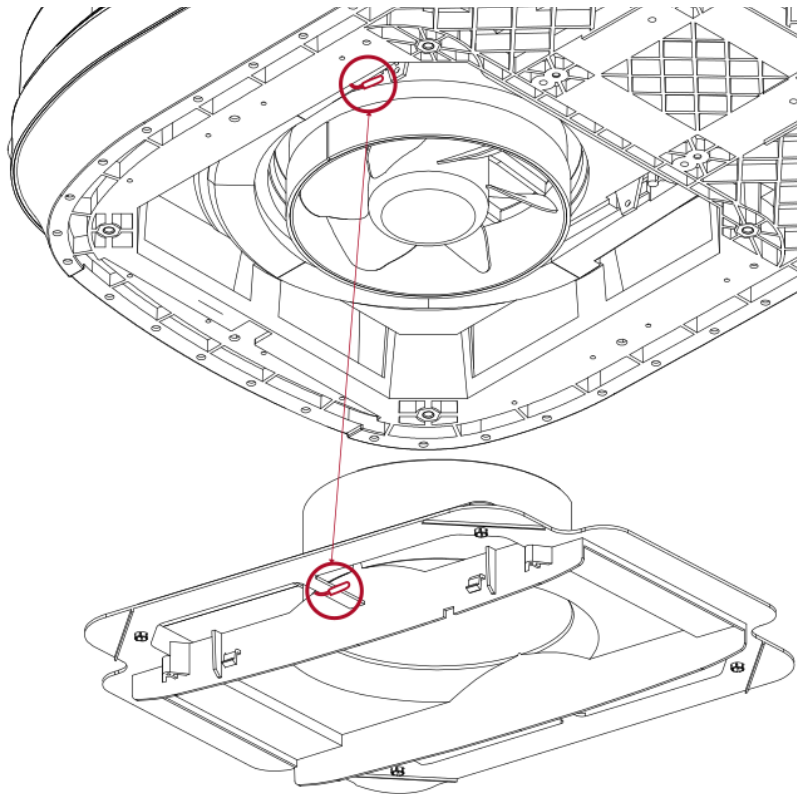
- 4) This installation should be carried out by experienced technical person to avoid any hazards. Connect the wires according to the **WIRE DIAGRAM**.



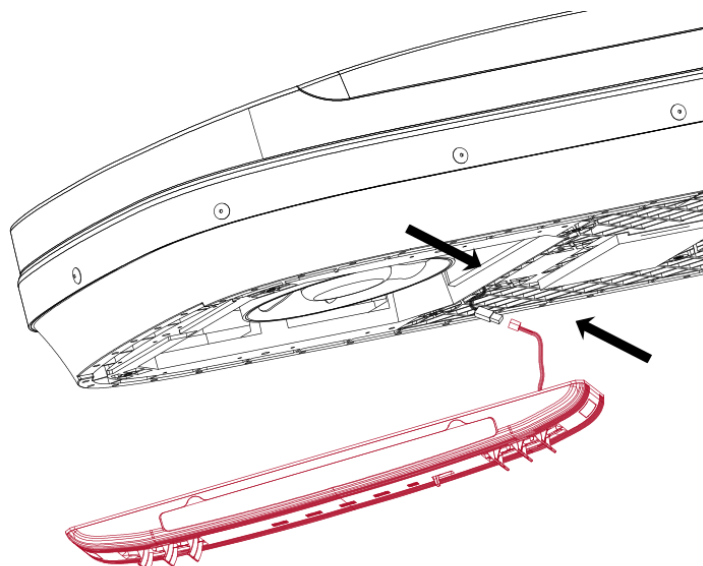
- 5) Insert Bolts, Spring washer, Washer and Plate washer through the mounting frame and into the Main unit. Tighten to **12 – 14 Nm**. Do not overtighten as this can cause damage and/or create an unbalance that may will result in resonant sounds from the product. (part(s) used: **C, H, I, J, M** and **N**)



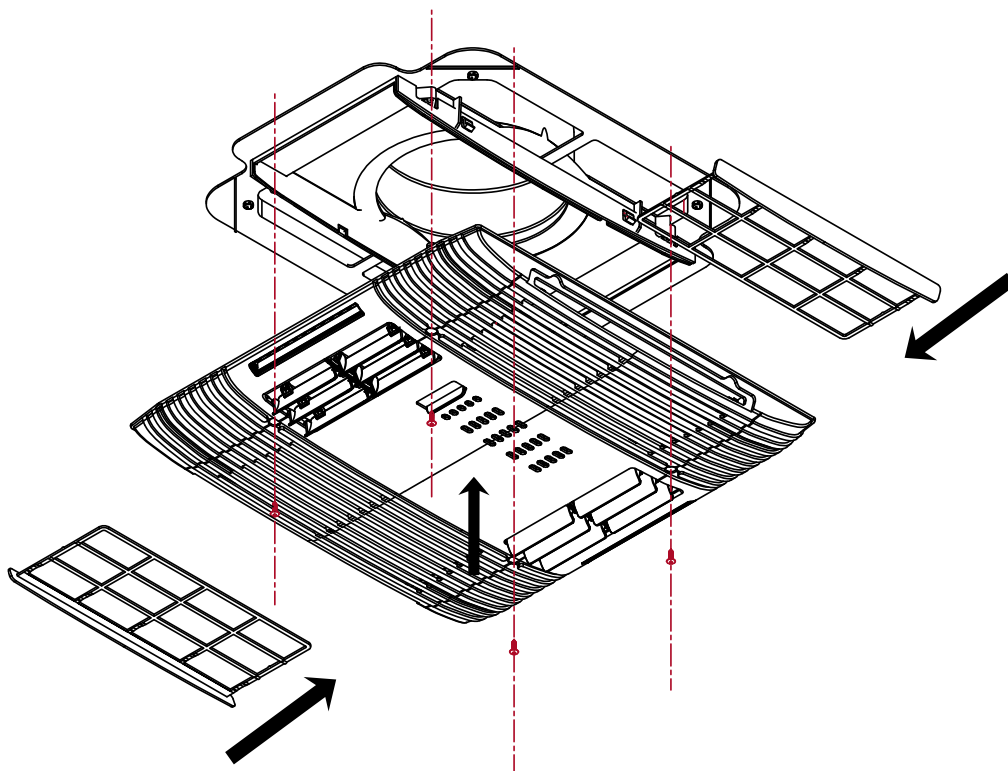
6) Move the Room temperature sensor from the Main unit to the Mounting frame and fasten it with Zip tie. It is important that the sensor does not interact with the hot/cold air coming from the Main unit. This can result in an error code and/or the product will not function as intended. (Part(s) used: **N**)



7) Connect the multiplug from Plenum unit to the Main. (Part(s) used: **D**)

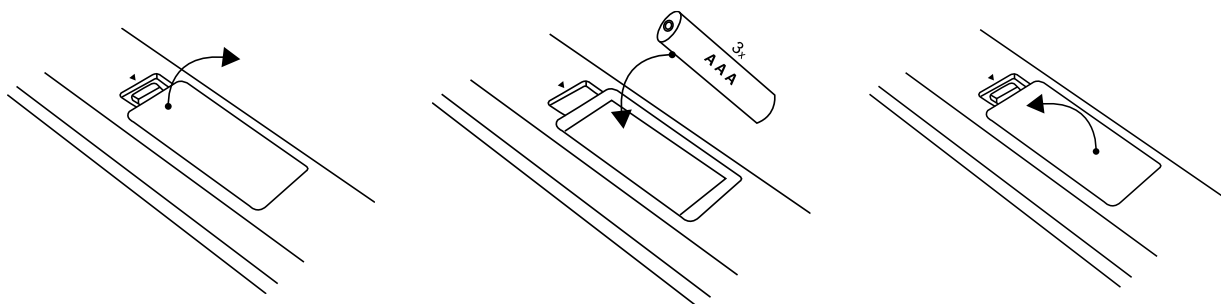


8) Push the Plenum up against the Main unit and align them. Then mount the 4 screws like illustrated below. If the filters are not installed, please insert them.
(Part(s) used: **L**)

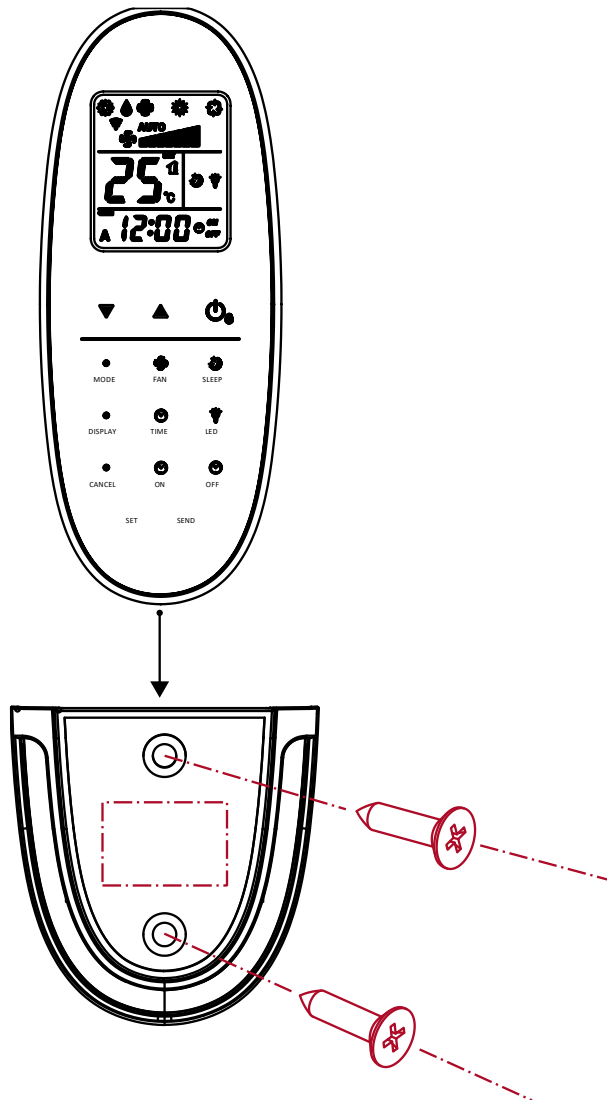


9) Remove the back cover of the remote. Insert 3x AAA batteries with the correct polarities and then reattach the back cover. (Part(s) Used: **E** and **G**)

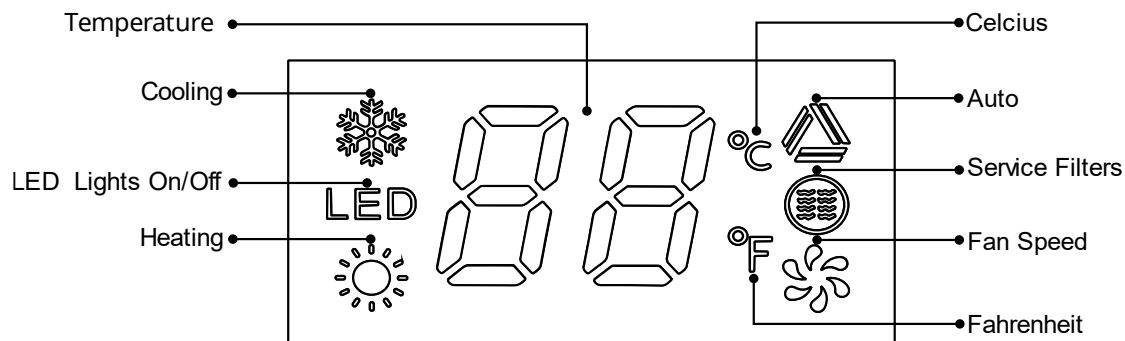
Note: Due to transport restrictions the product can be delivered without batteries.



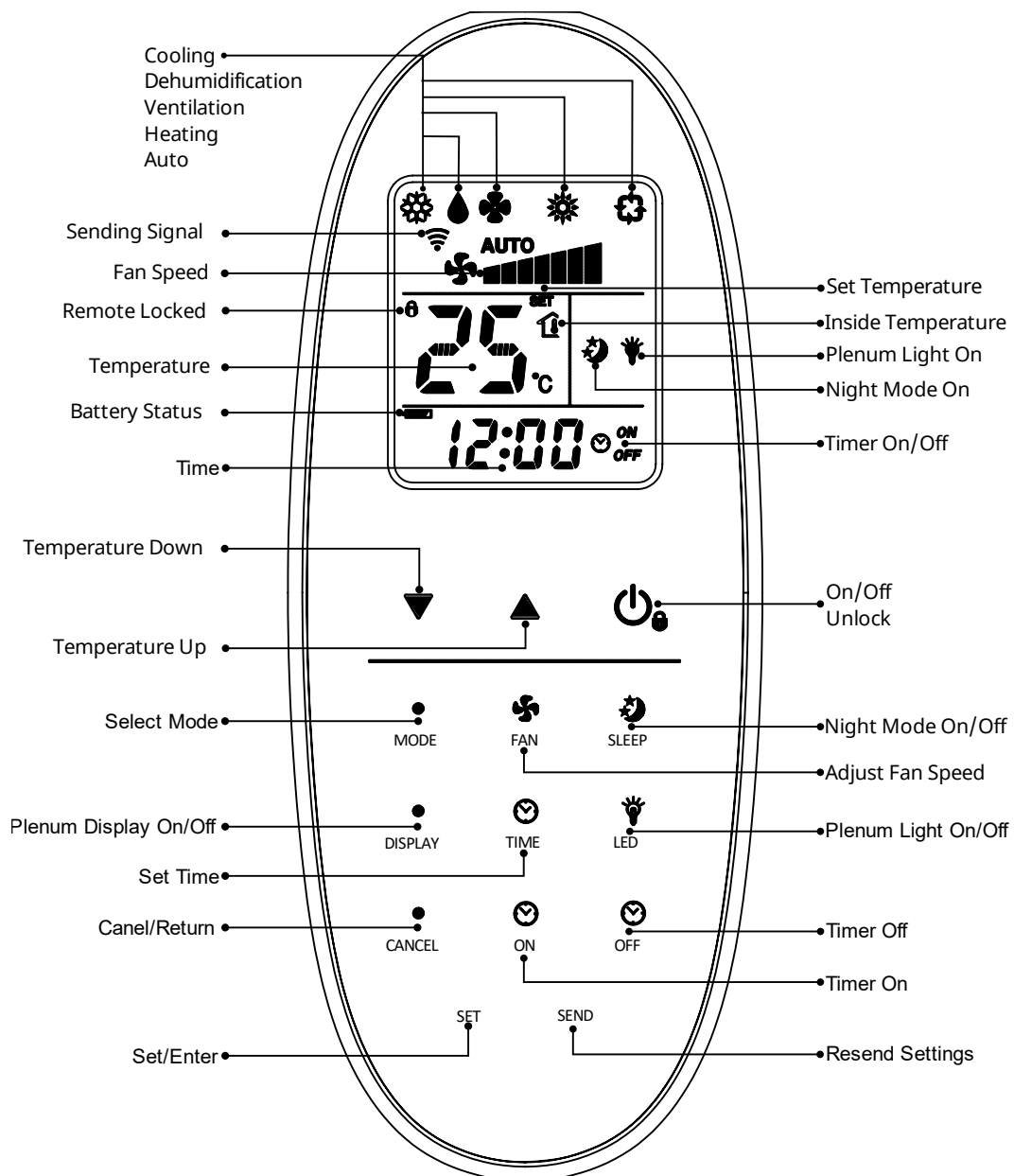
10) Find a proper spot for the remote control. Remove the plastic for the tape on the backside of the Remote-Control Bracket and mount it leveled. Insert the screws and slide down the remote control. (Part(s) used: **F** and **K**)



PLENUM DISPLAY





REMOTE CONTROL



HOW TO OPERATE BY REMOTE CONTROL





- **TURN ON**

Point directly at the Plenum and press the “Power ” button to unlock the remote control. Press the “Power ” button again to start the unit. The plenum beeps when it has received the information. The unit will start on the last used setting. Temperature and mode will now be shown in the plenum display.



- **TURN OFF**

Press the “Power ” key again, unit turns off and the plenum will display nothing.




- **COOLING MODE**

Press the “MODE” button to select the “” Cooling mode. Press “ FAN” button to increase fan speed. Press the “Up  ” or “Down  ” button to set desired temperature.






- **DEHUMIDIFICATION MODE**

Press the “MODE” button to select the “” Dehumidification mode. the fan speed is not adjustable and will be forced to minimum speed. The plenum will display “.” Make sure to set the temperature at least 1 °C lower than room temperature to activate the dehumidification mode.

- **VENTILATION MODE**




Press the “MODE” button to select the “” Ventilation mode. Press the “ FAN” button to choose between Low/Medium/High/AUTO settings. The plenum will display “” and the room temperature.

- **HEATING MODE**

Press the “MODE” button to select the “” Heating mode. Press “ FAN” button to increase fan speed. Press the “Up  ” or “Down  ” button to set desired temperature. The plenum will display “” and the set temperature.

- **AUTO MODE**


Press the “MODE” button to select the “/ ” Auto mode. Fan speed will be set

automatically. Press " **FAN**" button to increase fan speed. Press the "Up  " or "Down  " button to set desired temperature. Depending upon the difference between the set temperature and the ambient temperature the air conditioner will automatically switch between cooling- or heating mode.

- **CELSIUS AND FAHRENHEIT**

Press the "Up  " and "Down  " button for 5 seconds to switch between Celsius and Fahrenheit








- **SLEEP MODE**

Press the " **SLEEP**" button to select activate or deactivate sleep mode. When activated in cooling mode, after 1 hour the temperature will automatically increase 1 degree, and after 2 hours it will increase 2 degrees, then it will maintain the same temperature until it automatically turns off after 8 hours. When activated in heating mode, after 1 hour it will automatically decrease 1 degree, and after 1 hour, and after 2 hours it will decrease 2 degrees, then it will maintain the same temperature until it automatically turns off after 8 hours.


- **DISPLAY**

Press the "**DISPLAY**" button to select turn on/off the display in the Plenum.

- **TIME**

Press the " **TIME**" button once to adjust hours. Press the "Up  " or "Down  " button to set desired time. Press the " **TIME**" button twice to adjust the minutes. Press the "Up  " or "Down  " button to set desired time. Press the " **TIME**" thrice or the "**SET**" button to confirm.


- **LED**

Press the " **LED**" button to turn on/off the Plenum LED lights.

- **CANCEL**

Press the "**CANCEL**" button to undo any current settings.

- **ON**

Press the " **ON**" button to set a timer for the air conditioner to automatic start on current settings. Please see section **TIME** how to set timer. Press "**SET**" to

confirm or "**CANCEL**" to remove the setting. When activated **ON** will be shown in the display of the remote.

- **OFF**

Press the "🕒 **OFF**" button to set a timer for the air conditioner to automatic stop on current settings. Please see section **TIME** how to set timer. Press "**SET**" to confirm or "**CANCEL**" to remove the setting. When activated **OFF** will be shown in the display of the remote.

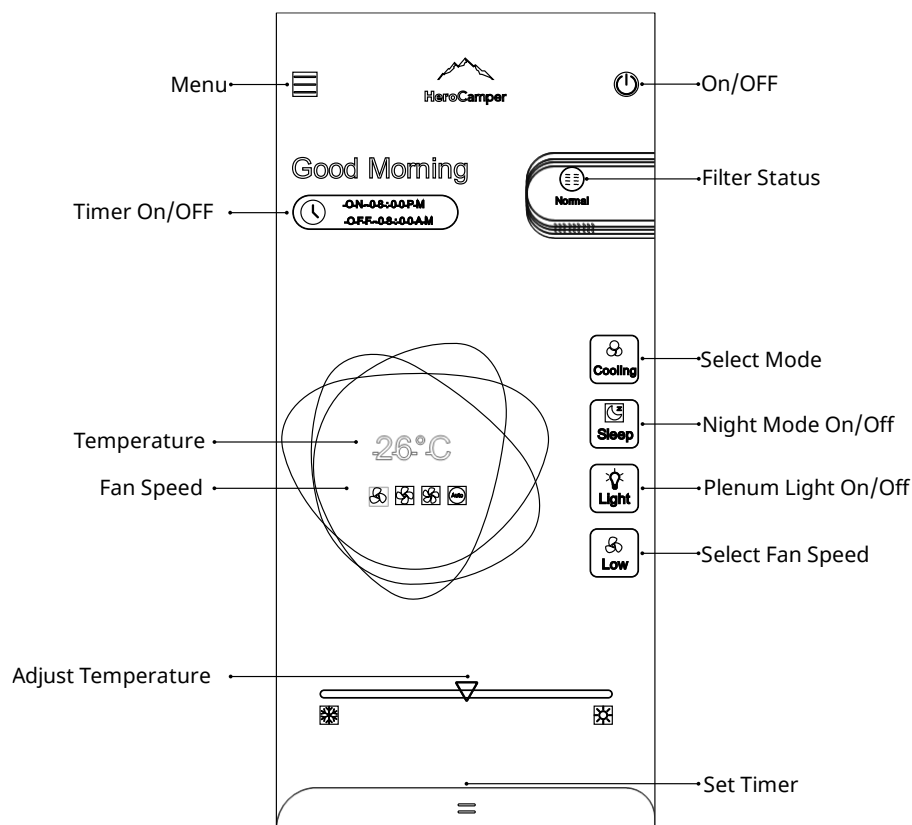
- **SET**

Press the "**SET**" button to confirm current choice.

- **SEND**


Press the "**SEND**" button to resend any settings again to the aircon. The Plenum will make a beep sound upon confirmation.

HOW TO OPERATE BY APP



MAINTENANCE

- **FILTER**

The air filter components need to be maintained periodically. Check and clean the filters each week when in use. The system will remind you to clean filters after 500h compressor time, it will be shown with an icon  on the Plenum display. Please see **INSTALLATION STEP 8** for illustration. Remove the filters from the Plenum and replace as necessary or wash gently in warm water with a touch of detergent. Press the "**CANCEL**" button for 5 seconds to reset the display indicator.

- **Bolts**

It is recommended that the bolts holding the Main Unit are retightened to 12-14 Nm within 3 months after the first installation of the product. These bolts should be regularly inspected a minimum of every 12 months throughout the air conditioner's life.

- **STORAGE**

It is recommended that the aircon is operated regularly within 3 months to avoid any parts getting stuck. It is recommended to cover the air intake for storage above 3 months. Avoid placing the unit under trees or similar for any unwanted parts to enter the air intake. This can be obtained with a cover. **!IMPORTANT!** never use the air conditioner with a protection cover.

- **CLEANING**

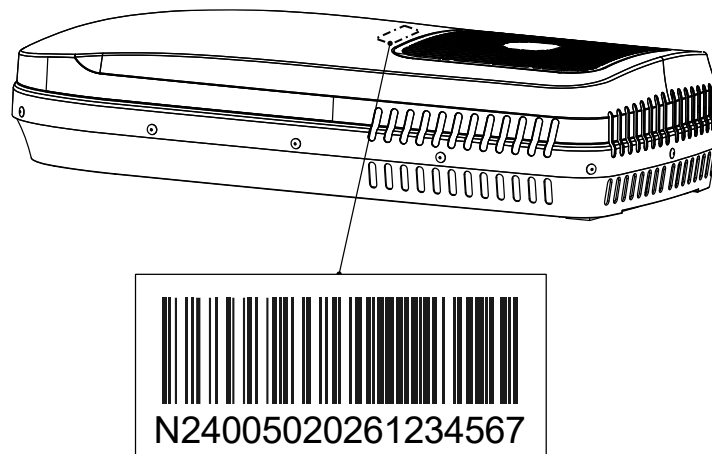
Clean the product with warm water and PH-neutral soap. Avoid any water entering the air intake. Clean inside the Plenum with a damp microfiber towel.

ERROR CODES

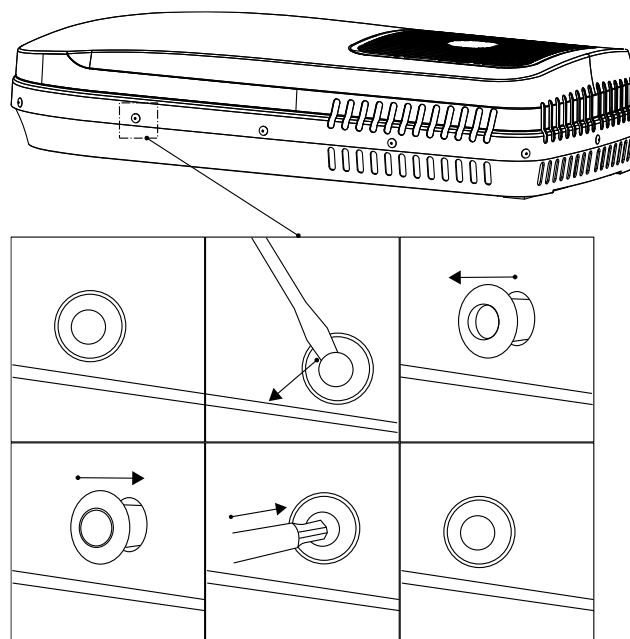
E0	Communication fault between display panel and Main control board.
Suggestion(s)	Try to remove and inspect the display cable, see INSTALLATION STEP 7 for illustration. Reconnect them again to see if the issue has been solved. If issue still occur display PCB and/or main PCB is defect.
E1	Fault in connection to room temperature sensor or other damage to sensor.
Suggestion(s)	Replace room temperature sensor and/or Replace main PCB.
E2	Fault in connection to indoor coil temperature sensor or other damage.
Suggestion(s)	Replace indoor temperature sensor and/or replace main PCB.
E3	Fault in connection to outdoor coil temperature sensor or other damage.
Suggestion(s)	Replace outdoor temperature sensor and/or replace main PCB.
E4	No temperature change is detected on indoor coil sensor at first 20min after start of compressor. Temperature sensor incorrectly installed. Temperature sensor bad connection or defect. Insufficient refrigerant. System leakage. Main PCB defect.
Suggestion(s)	The temperature sensor has not been installed correctly see INSTALLATION STEP 6 . Replace Temperature sensor. The system needs to be topped up with refrigerant. Test for leaking or broken pipes and repair. Main PCB defect.
E5	Indoor/Outdoor coil overheat protection.
Suggestion(s)	The temperature sensor has not been installed correctly see INSTALLATION STEP 6 . Check the outer fan to see if it is stuck or defective replace if necessary. PCB defect.
E7	The compressor is self-protected and stopped due to too high load.
Suggestion(s)	Check the terminals on the side of the compressor and verify if they are intact. Check the soldering to the coil; if necessary, it should be re-soldered. Compressor or pipes is blocked.

TROUBLESHOOTING

The serial number can be located on top of the Main Unit. Please always provide this number when contacting the dealer where you bought the product. It is necessary to ensure the correct spare part(s).



The top cover can be removed if necessary. !WARNING! Always disconnect the power for the product due to live parts inside. Use a flat headed screwdriver and gently slide out the inner core of the fastener clip. Afterwards pull the hole clip out. To insert again plug in the clip and use a tool with as close diameter to the clip as possible and push the center of the clip in



- **Defrosting**

The system is set automatically to monitor freezing of the evaporator, If this happens the system will automatically start the "Defrosting" program. It will show "DF" on the display, then the 4-way valve will change its flow direction for 1 minute and compressor will run 10 minutes, until the system detects there is no more frosting on the evaporator. After this process is finished, the "DF" will disappear from the display, and the unit will continue running.

- **Cool - Heat Mode Switch**

When switching between Heat- and Cool-Mode the compressor will have a 3-minute delay to change the flow direction of the refrigerant.

- **No reaction for from the A/C**

If the unit is unable to start, please check the fuse. **!WARNING!**
Always disconnect the power for the product due to live parts inside. Check if the fuse is blown or it is not correctly connected. Please see **WIREDIAGRAM** for further information.



Your product is designed and manufactured with high quality materials and components which can be recycled and reused. This symbol means that electrical and electronic equipment, at their end-of-life, should be disposed of separately from your household waste. Please dispose of this equipment at your local community waste collection / recycling center. In the European Union there are separate collection systems for used electrical and electronic products.

Please help us conserve the environment we live in!

CERTIFICATE

NINGBO CUSTOMS DISTRICT TECHNOLOGY CENTER		
CERTIFICATE OF CONFORMITY		
		NO.:E22100862
Applicant:	HeroCamper ApS	
Manufacturer:	HeroCamper ApS	
Address:	Lammefjordsvej 5 6715 Esbjerg N Denmark	
Product Description:	Air conditioner	
Model No.:	K2400-50, A2000-50	
Technical Data:	220-240V~, 50Hz	
The submitted sample of the above equipment has been tested for CE marking according to following European Directive and following standards: Electromagnetic Compatibility (EMC) directive 2014/30/EU		
Standards	Report number	Report date
EN IEC 55014-1:2021	DQ2200007762-E	2022-10-08
EN IEC 55014-2:2021		
EN IEC 61000-3-2:2019+A1:2021		
EN/IEC 61000-3-11:2019		
The referred test report(s) show that the product complies with standard(s) recognized as giving presumption of compliance with the essential requirements in the specified European Directive This certificate does not imply assessment of the production of the product The CE marking may be affixed if all relevant and effective European Directives with CE are applicable		
NingBo (P.R. China), Oct.08 th , 2022		
CE		Signed by: He Ben 
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Ningbo Customs District Technology Center	No.66, Qingyi Road, Hi-tech District, Ningbo, Zhejiang, China.	Tel: +86 574 8756 0254; E-mail: hp@nbyjg.com;