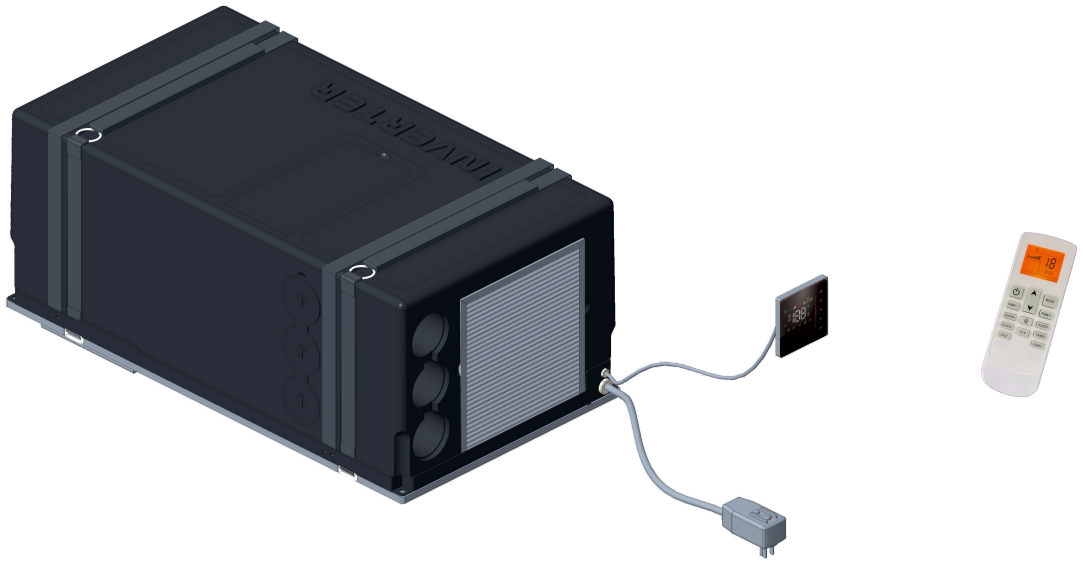
iHider Inverter

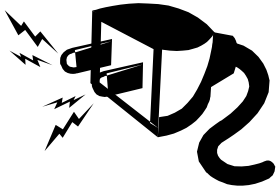
Heat pump

Under-bench Air Conditioner

Operation, maintenance and installation manual



CAUTION



For safe operation, this unit must:

1. Be connected to a properly grounded electrical supply with the proper voltage as stated on the rating plate.
2. Have proper over current protection (i.e. time delay Fuse / HVAC - Breaker) as listed on the Rating Plate.
3. Don’t use extension power cord.
4. Turn off electric power before service or installation.
5. All electrical connections and wiring must be installed by a qualified electrical and conform to the National Electrical code and all local codes which have jurisdiction.

Failure to do so can result in property damage, personal injury and /or death.

Table of Contents

1 General information

AS A SAFETY PRECAUTION

	**WARNING**	THIS SYMBOL THAT THIS APPLIANCE USED A FLAMMABLE REFRIGERANT. IF THE REFRIGERANT IS LEAKED AND EXPOSED TO AN EXTERNAL IGNITION SOURCE, THERE IS A RISK OF FIRE.
	**CAUTION**	THIS SYMBOL THAT THE OPERATION MANUAL SHOULD BE READ CAREFULLY.
	**CAUTION**	THIS SYMBOL THAT A SERVICE PERSONNEL SHOULD BE HANDLING THIS EQUIPMENT WITH REFERENCE TO THE INSTALLATION MANUAL.
	**CAUTION**	THIS SYMBOL THAT INFORMATION IS AVAILABLE SUCH AS THE OPERATING MANUAL OR INSTALLATION MANUAL.

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

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

That the appliance shall be installed in accordance with national wiring regulations.

If the SUPPLY CORD is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

Before servicing the appliance
Checks to the area:

1 General information

Prior to beginning work on systems containing flammable refrigerants, safety checks are necessary to ensure that the risk of ignition is linimised. For repair to the refrigerating system, the following precautions shall be complied with prior to conducting work on the system

Work procedure:
Work shall be undertaken under a controlled procedure so as tominimise the risk of a flammable gas or vapour being present while the work is being performed.

General work area:
All maintenance staff and others working in the local area shall be instructed on the nature of work being carried out. Work in confined spaces shall be avoided. The area around the workspace shall be sectioned off. Ensure that the conditions within the area have been made safe by control of flammable material.

Checking for presence of refrigerant:
The area shall be checked with an appropriate refrigerant detector prior to and during work, to ensure the technician is aware of potentially flammable atmospheres. Ensure that the leak detection equipment being used is suitable for use with flammable refrigerants, i.e. non-sparking, adequately sealed or intrinsically safe.

Presence of fire extinguisher:
If any hot work is to be conducted on the refrigeration equipment or any associated parts, appropriate fire extinguishing equipment shall be available to hand. Have a dry powder or CO2 fire extinguisher adjacent to the charging area.

No ignition sources:
No person carrying out work in relation to a refrigeration system which involves exposing any pipe work that contains or has contained flammable refrigerant shall use any sources of ignition in such a manner that it may lead to the risk of fire or explosion. All possible ignition sources, including cigarette smoking, should be kept sufficiently far away from the site of installation, repairing, removing and disposal, during which flammable refrigerant can possibly be released to the surrounding space. Prior to work taking place, the area around the equipment is to be surveyed to make sure that there are no flammable hazards or ignition risks.

Ensure that the area is in the open or that it is adequately ventilated before breaking into the system or conducting any hot work. A degree of ventilation shall continue during the period that the work is carried out.

1 General information

The ventilation should safely disperse any released refrigerant and preferably expel it externally into the atmosphere.

Checks to the refrigeration equipment:

Where electrical components are being changed, they shall be fit for the purpose and to the correct specification. At all times the manufacturer's maintenance and service guidelines shall be followed. If in doubt consult the manufacturer's technical department for assistance. The following checks shall be applied to installations using flammable refrigerants:

-- the charge size is in accordance with the room size within which the refrigerant containing parts are Installed;
-- the ventilation machinery and outlets are operating adequately and are not obstructed;
-- if an indirect refrigerating circuit is being used, the secondary circuit shall be checked for the presence of refrigerant;
-- marking to the equipment continues to be visible and legible. Markings and signs that are illegible shall be corrected;
-- refrigeration pipe or components are installed in a position where they are unlikely to be exposed to any substance which may corrode refrigerant containing components, unless the components are constructed of materials which are inherently resistant to being corroded or are suitably protected against being so corroded.

Checks to electrical devices:

Repair and maintenance to electrical components shall include initial safety checks and component inspection procedures. If a fault exists that could compromise safety, then no electrical supply shall be connected to the circuit until it is satisfactorily dealt with. If the fault cannot be corrected immediately but it is necessary to continue operation, an adequate temporary solution shall be used. This shall be reported to the owner of the equipment so all parties are advised. Initial safety checks shall include:

that capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;

that no live electrical components and wiring are exposed while charging, recovering or purging the system;

that there is continuity of earth bonding.

Repairs to sealed components:

During repairs to sealed components, all electrical supplies shall be disconnected from the equipment being worked upon prior to any removal of sealed covers, etc. If it is absolutely necessary to have an electrical supply to equipment during servicing, then a permanently operating form of leak detection shall be located at

the most critical point to warn of a potentially hazardous situation.
Particular attention shall be paid to the following to ensure that by working on electrical components, the casing is not altered in such a way that the level of protection is affected. This shall include damage to cables, excessive number of connections, terminals not made to original specification, damage to seals, incorrect fitting of glands, etc.
Ensure that apparatus is mounted securely.
Ensure that seals or sealing materials have not degraded such that they no longer serve the purpose of preventing the ingress of flammable atmospheres. Replacement parts shall be in NOTE
The use of silicon sealant may inhibit the effectiveness of some types of leak detection equipment. Intrinsically safe components do not have to be isolated prior to working on them.

Repair to intrinsically safe components:
Do not apply any permanent inductive or capacitance loads to the circuit without ensuring that this will not exceed the permissible voltage and current permitted for the equipment in use. Intrinsically safe components are the only types that can be worked on while live in the presence of a flammable atmosphere. The test apparatus shall be at the correct rating. Replace components only with parts specified by the manufacturer. Other parts may result in the ignition of refrigerant in the atmosphere from a leak

Cabling:
Check that cabling will not be subject to wear, corrosion, excessive pressure, vibration, sharp edges or any other adverse environmental effects. The check shall also take into account the effects of aging or continual vibration from sources such as compressors or fans.

Detection of flammable refrigerants:
Under no circumstances shall potential sources of ignition be used in the searching for or detection of refrigerant leaks. A halide torch (or any other detector using a naked flame) shall not be used.

Leak detection methods:
The following leak detection methods are deemed acceptable for systems containing flammable refrigerants.
Electronic leak detectors shall be used to detect flammable refrigerants, but the sensitivity may not be adequate, or may need re-calibration. (Detection equipment shall be calibrated in a refrigerant-free area.)
Ensure that the detector is not a potential source of ignition and is suitable for the refrigerant used.
Leak detection equipment shall be set at a percentage of the LFL of the refrigerant and shall be calibrated to the

refrigerant employed and the appropriate percentage of gas (25 % maximum) is confirmed.
Leak detection fluids are suitable for use with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe-work. If a leak is suspected, all naked flames shall be removed/extinguished.If a leakage of refrigerant is found which requires brazing, all of the refrigerant shall be recovered from the system, or isolated (by means of shut off valves) in a part of the system remote from the leak. Oxygen free nitrogen (OFN) shall then be purged through the system both before and during the brazing process.

Removal and evacuation:
When breaking into the refrigerant circuit to make repairs-or for any other purpose-conventional procedures shall be used. However, it is important that best practice is followed since flammability is a consideration.
The following procedure shall be adhered to:

- remove refrigerant;
- purge the circuit with inert gas;
- evacuate;
- purge again with inert gas;
- open the circuit by cutting or brazing.

The refrigerant charge shall be recovered into the correct recovery cylinders. The system shall be “flushed” with OFN to render the unit safe.
This process may need to be repeated several times. Compressed air or oxygen shall not be used for this task.
Flushing shall be achieved by breaking the vacuum in the system with OFN and continuing to fill until the working pressure is achieved, then venting to atmosphere, and finally pulling down to a vacuum.
This process shall be repeated until no refrigerant is within the system.
When the final OFN charge is used, the system shall be vented down to atmospheric pressure to enable work to take place.
This operation is absolutely vital if brazing operations on the pipework are to take place.
Ensure that the outlet for the vacuum pump is not close to any ignition sources and there is ventilation available.

Charging procedures:
In addition to conventional charging procedures, the following requirements shall be followed.
-- Ensure that contamination of different refrigerants does not occur when using charging equipment.
Hoses or lines shall be as short as possible to minimise the amount of refrigerant contained in them.

-- Cylinders shall be kept upright.
-- Ensure that the refrigeration system is earthed prior to charging the system with refrigerant.
-- Label the system when charging is complete (if not already).
-- Extreme care shall be taken not to overfill the refrigeration system.
Prior to recharging the system it shall be pressure tested with OFN. The system shall be leak tested on completion of charging but prior to commissioning. A follow up leak test shall be carried out prior to leaving the site.

Decommissioning:
Before carrying out this procedure, it is essential that the technician is completely familiar with the equipment and all its detail. It is recommended good practice that all refrigerants are recovered safely. Prior to the task being carried out, an oil and refrigerant sample shall be taken in case analysis is required prior to re-use of reclaimed refrigerant. It is essential that electrical power is available before the task is commenced.

a) Become familiar with the equipment and its operation.
b) Isolate system electrically.
c) Before attempting the procedure ensure that:
- mechanical handling equipment is available, if required, for handling refrigerant cylinders;
- all personal protective equipment is available and being used correctly;
- the recovery process is supervised at all times by a competent person;
- recovery equipment and cylinders conform to the appropriate standards.

d) Pump down refrigerant system, if possible.
e) If a vacuum is not possible, make a manifold so that refrigerant can be removed from various parts of the system.
f) Make sure that cylinder is situated on the scales before recovery takes place.
g) Start the recovery machine and operate in accordance with manufacturer's instructions.
h) Do not overfill cylinders. (No more than 80 % volume liquid charge).
i) Do not exceed the maximum working pressure of the cylinder, even temporarily.
j) When the cylinders have been filled correctly and the process completed, make sure that the cylinders and the equipment are removed from site promptly and all isolation valves on the equipment are closed off.
k) Recovered refrigerant shall not be charged into another refrigeration system unless it has been cleaned and checked.

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Labelling:
Equipment shall be labelled stating that it has been de-commissioned and emptied of refrigerant. The label shall be dated and signed. Ensure that there are labels on the equipment stating the equipment contains flammablerefrigerant.

Recovery:
When removing refrigerant from a system, either for servicing or decommissioning, it is recommended good practice that all refrigerants are removed safely.
When transferring refrigerant into cylinders, ensure that only appropriate refrigerant recovery cylinders are employed. Ensure that the correct number of cylinders for holding the total system charge are available.
All cylinders to be used are designated for the recovered refrigerant and labelled for that refrigerant (i.e. special cylinders for the recovery of refrigerant). Cylinders shall be complete with pressure relief valve and associated shut-off valves in good working order.
Empty recovery cylinders are evacuated and, if possible, cooled before recovery occurs.
The recovery equipment shall be in good working order with a set of instructions concerning the equipment that is at hand and shall be suitable for the recovery of flammable refrigerants. In addition, a set of calibrated weighing scales shall be available and in good working order.
Hoses shall be complete with leak-free disconnect couplings and in good condition. Before using the recovery machine, check that it is in satisfactory working order, has been properly maintained and that any associated electrical components are sealed to prevent ignition in the event of a refrigerant release. Consult manufacturer if in doubt.
The recovered refrigerant shall be returned to the refrigerant supplier in the correct recovery cylinder, and the relevant Waste Transfer Note arranged. Do not mix refrigerants in recovery units and especially not in cylinders.
If compressors or compressor oils are to be removed, ensure that they have been evacuated to an acceptable level to make certain that flammable refrigerant does not remain within the lubricant. The evacuation process shall be carried out prior to returning the compressor to the suppliers. Only electric heating to the compressor body shall be employed to accelerate this process. When oil is drained from a system, it shall be carried out safely.

1 General information

1.1. Scope of the manual

This manual has been drawn up by the Manufacturer and is an integral part of the machine.
The information it contains, if observed, can guarantee correct use of the machine.
The first part of the manual is for the user , while the second part is for the expert personnel who install the machine.

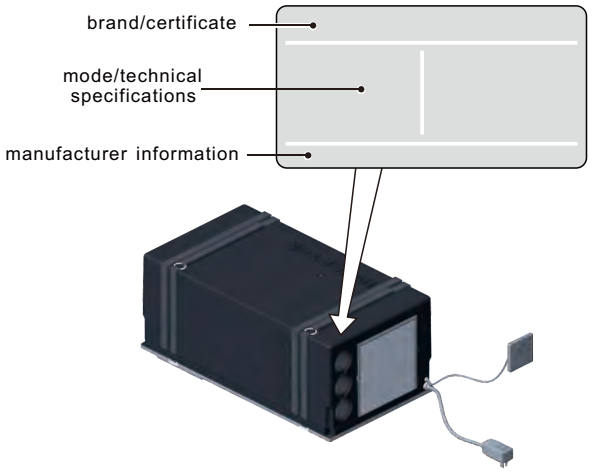
To highlight some parts of the text, the following symbols have been added:

This operation may be a source of danger.

Useful advice.

Information on being environment friendly.

1.2. Manufacturer and machine identification



1.3. Machine description

This machine has been designed and built to be installed on vehicles (motor homes, caravans, special vehicles, etc.) in order to improve the internal temperature. When the weather is hot it supplies cool and dehumidified air, when the weather is cold it supplies hot air without however replacing the vehicle's original heating system. In both cases the air temperature is adjustable.

1.4. User tips

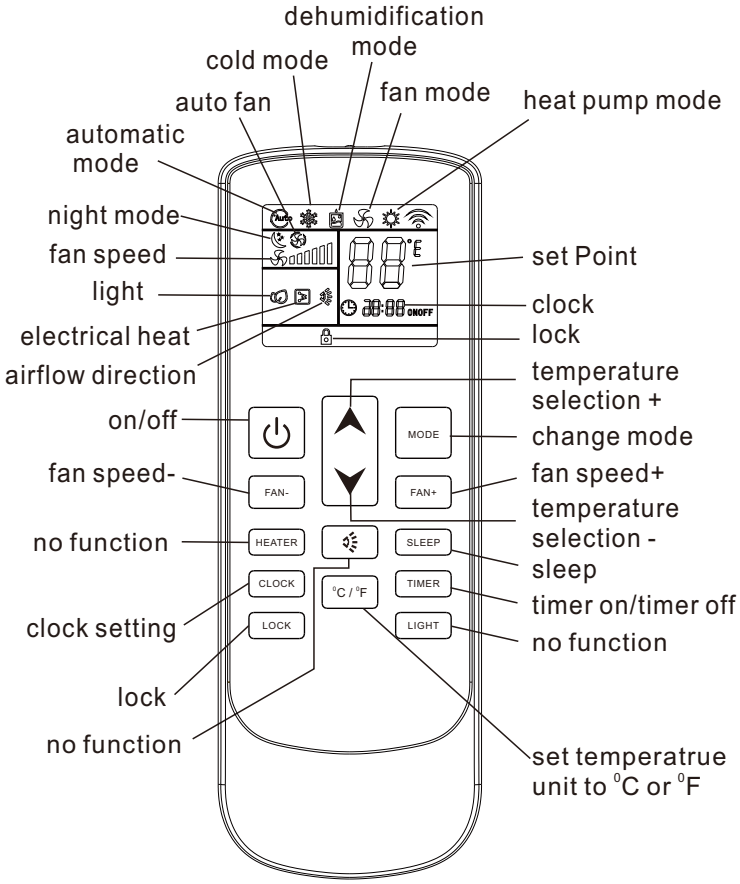
The machine performance can be improved by taking some precautions.

- Improve the vehicle's heat insulation by eliminating openings and covering the glass surface with reflecting curtains.
- Avoid frequently opening doors and windows when not necessary.
- Select the appropriate temperature and fan speed. Direct the air vents suitably.
- In order to avoid machine malfunctioning and risks of injury, take the following precautions;
- Do not obstruct the ventilation air inlet and outlet with cloth, paper or any other items;
- do not put your hands or any other items into the openings;
- do not spray water inside the machine;
- keep flammable substacnces well away from the machine.
- Clean the air filter periodically.

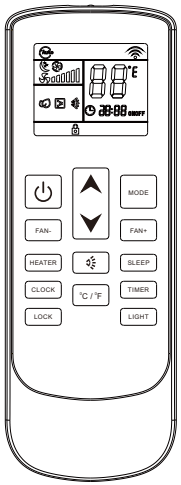
1.5. Description of the controls

Selecting functional status

At the time of **switching on, the system waits for a few minutes before operating the compressor.**
Press the **"MODE"** button to move between the possible states (automatic, cold, dehumidification, ventilation, heat pump) and wait two seconds on the selected state for this to be confirmed by the system with an audible warning(the buzzer is inside the machine). Always point the remote control towards the wall pad to send all the signals.



Automatic mode



1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select automatic mode[1].
3	▲ ▼	The temperature selection buttons are disabled.
4	FAN- FAN+	Press the fan speed button to select low, medium or high speed or automatic speed[2].
5	⏻	Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

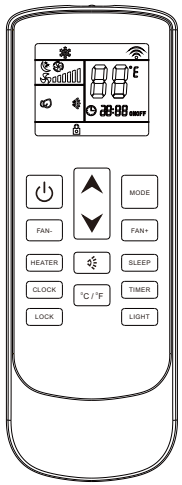
note[1]: In this mode the machine manages the compressor, heat pump and fan speed entirely automatically by comparing the set temperature with the internal temperature according to table A.

note[2]: on automatic speed the correct ventilation is set according to the difference in temperature between the set point and the ambient temperature.

TABLE A

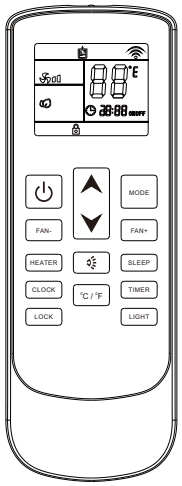
Internal temperature	T≤68°F	68°F<T<77°F	T≥77°F
Operating mode	Heat pump o ventilation	Dehumidification o ventilation	Cold
Set point	68°F	72°F	77°F

Cold mode



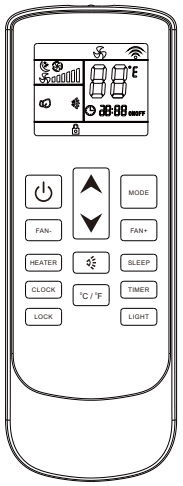
1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select cold mode.
3	▲ ▼	Press the selection button to set the ambient temperature on the desired value between 64°F and 86°F.
4	FAN- FAN+	Press the fan speed button to select low, medium or high speed or automatic speed[2].
5	⏻	Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Dehumidification mode



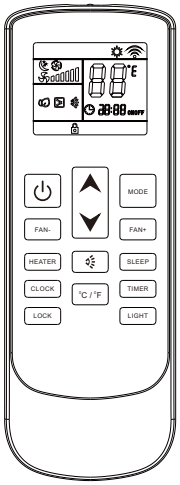
1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select dehumidification mode.
3	▲ ▼	Press the selection button to set the ambient temperature on the desired value between 64°F and 86°F.
4	FAN- FAN+	The fan speed selection button is disabled.
5	⏻	Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

fan mode



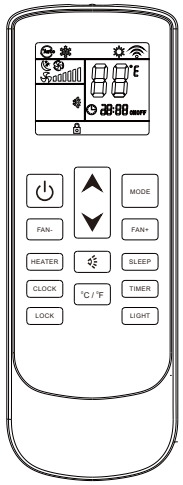
1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select fan mode.
3	▲ ▼	Press the selection button to set the ambient temperature on the desired value between 64°F and 86°F.
4	FAN- FAN+	Press the fan speed button to select low, medium or high speed or automatic speed[2].
5	⏻	Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Heat pump mode



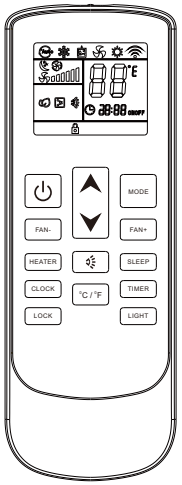
1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select heat pump mode.
3	▲ ▼	Press the selection button to set the ambient temperature on the desired value between 64°F and 86°F.
4	FAN- FAN+	Press the fan speed button to select low, medium or high speed or automatic speed[2].
5	⏻	Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Sleep mode



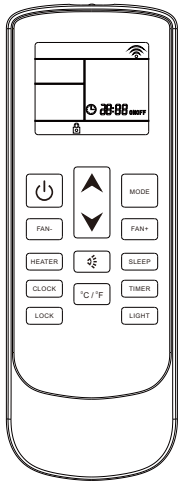
1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select the desired mode from all the ones available.
3	TIMER	Press the sleep mode button to turn this function on and off.
4	▲ ▼	Press the selection button to set the ambient temperature on the desired value between 64°F and 86°F.
5	FAN- FAN+	This mode sets the ventilation on low speed therefore it is not possible to switch onto the other available options.
6	⏻	Press the on/off button to switch off the machine. This mode stays in memory for switching on the next time.

Timer off mode



1	⏻	Press the on/off button to switch on the machine.
2	MODE	Press the change mode button to select the desired mode from all the ones available..
3	▲ ▼	Press the selection button to set the ambient temperature on the desired value between 64^{0}F and 86^{0}F.
4	FAN- FAN+	Press the fan speed button to select low, medium or high speed or automatic speed[2].
5	TIMER	Press the timer button to set the time when the machine must switch off[3].
6	▲ ▼	Press the selection buttons to change the time when the machine must switch off.
7	TIMER	Press the timer button to confirm the data entered.
8	TIMER	Pressing the timer button a third time si disables this function.

Timer on mode



1	⏻	The machine must be off.
2	TIMER	Press the timer button to set the time when the machine must switch on[4].
3	▲ ▼	Press the selection button to change the time when the machine must switch on.
4	TIMER	Press the timer button to confirm the data entered[5].
5	TIMER	Press the timer button a third time disables this function.

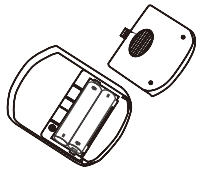
note[3]: When you press the button the first time the symbol on the display flashes to signal you are programming a switch-off; pressing it a second time saves the data and the icon stays on steady to signal activation of the timer off function; pressing it a third time turns off the timer off mode.

note[4]: When you press the button the first time the symbol on the display flashes to signal you are programming a switch-on; pressing it a second time saves the data and the icon stays on steady to signal activation of the timer on function; pressing it a third time turns off the timer on mode.

note[5]: At the set time the machine will start in automatic mode.

1.6. Installing and changing the remote control batteries

Take off the battery cover.
Insert the two batteries supplied(size AAA),paying attention to their polarity.
Fit the battery cover back on.
Check the remote control works properly by pressing the on button:
if, on pressing the button, no icon appears on the display then you need to re-install the batteries checking their polarity. The machine is connected to the power supply and ready for use.



1.7. Description of the wall pad

1. Mode key (M)
(1) Press the mode key briefly to switch the thermostat mode, automatic mode, cool mode and dehumidify mode, fan mode, heat pump mode.
(2) Press and hold the mode key to enter the special mode option. There are four special modes, including Fan switch, sleep switch, Electric auxiliary heat switch, Light switch, the above four items are switch by short press after entering special mode. After turning on the sleep mode, the fan is switched on switch to low speed. In which sleep cannot be started in fan mode and dehumidify mode;

2. FAN (fan)
Press the fan key briefly to switch the fan speed, automatic, high speed, medium speed wind and low speed. The electric auxiliary heat switch can only be turned on in heating mode (refer to infrared remote control).

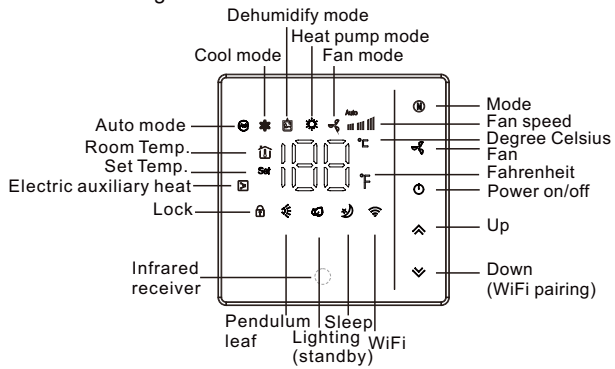
3.Turn on the key (POWER)
Press the switch button briefly to switch the switch state.

4. UP key (up)
Press short to increase the set temperature and increase the values of other options.

5. DOWN key (down)
Short press to reduce the set temperature and other options.

6. Child Lock Button(UP+DOWN)
Press the up key and the down key for a long time to open the child lock state. In this mode, the keys are invalid. Press and hold the up and down keys once again to cancel the child lock state.

7. WIFI connection (down button in shutdown state)
Press the down key for a long time in the off state to enter the WiFi connecting.



8. Auto Wifi

WI-FI CONNECTION

Before using your Wi-Fi thermostat for the first time, you must configure the Wi-Fi signal and setting through your smartphone or tablet. This will allow communication between your connecteddevices.

Step 1 Download your APP (Fig1-1)

Fig 1-1

Search for “ Smartlife ” in Apple Store or Google Play or use a browser to scan the QR code above (Figure 1-2), and complete account registration and installation according to the guidance of the APP.

Step 2. Connect the thermostat

Check the tutorial below to complete the connection and setup.

Method 1: Scan the QR code to configure the network guide (Fig 2.1-Fig 2.3)

Fig 1-2 IOS

Fig 1-2 Android

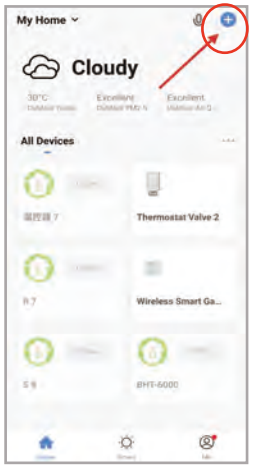


Fig 2.1

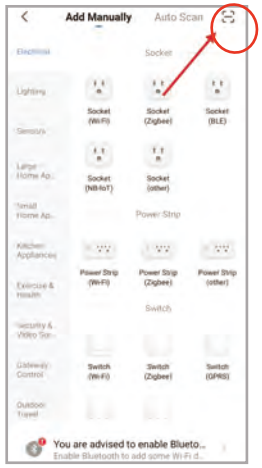


Fig 2.2

Scan this QR code

Fig 2.3

Method 2: Ordinary distribution network guidance
(Fig 2.1&Fig 2.3.1)

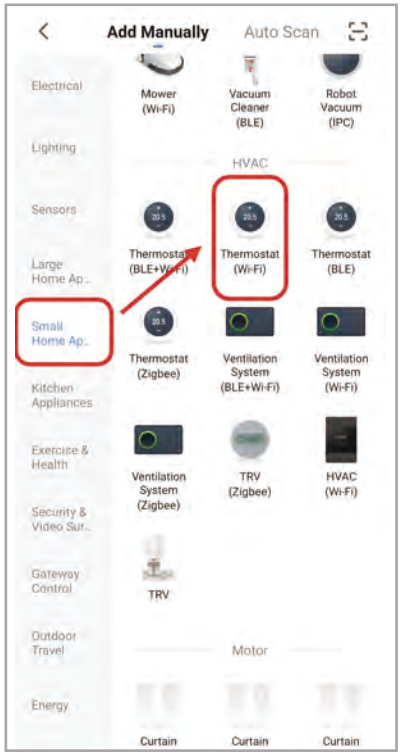


Fig 2.3.1

Network distribution mode:

1. EZ Mode
When the thermostat is off, press and hold the " ▽ " until the thermostat screen flashes quickly and displays the " ᯤ " icon, and then operate according to the following figure (Fig2.4-Fig 2.7)

Fig 2.4

Fig 2.5

Fig 2.6

Fig 2.7

2. APP Mode

When the thermostat is off, press and hold the " ∨ " until the thermostat screen flashes slowly and the " " icon is displayed (if the " " icon appears, continue to press the " ∨ " until the thermostat screen Flashes slowly and displays the " " icon), and then operate according to the following figure (Fig2.8-Fig 2.14)

Fig 2.8

Fig 2.9

After connecting to this hotspot, return to the "smartlife" APP

Fig 2.14

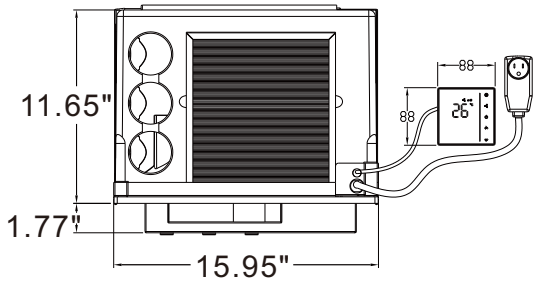
Fig 2.10

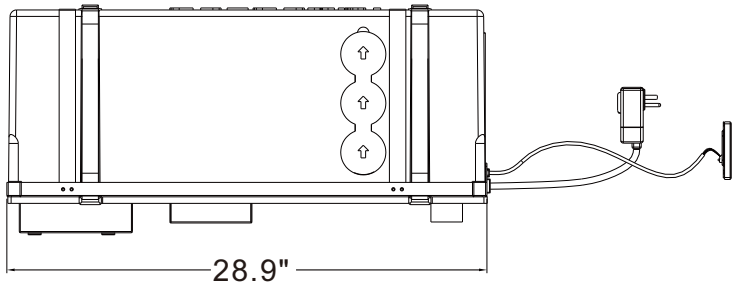
Fig 2.11

Fig 2.12

Fig 2.13

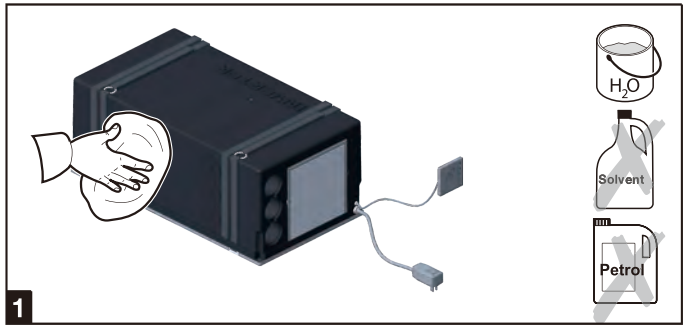
1.8. Technical data



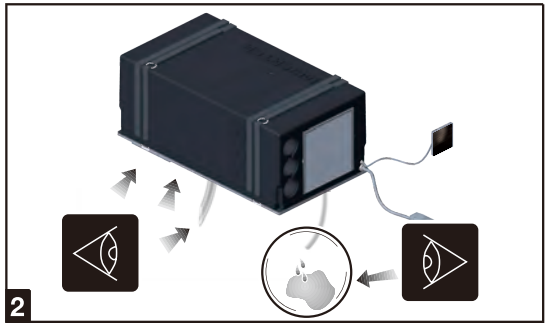


Description	Unit of measurement	Model iHider Inverter
Refrigerant type/quantity	oz	R32 / 13.75
Refrigerating capacity	Btu/h	10000
Heating capacity	Btu/h	9500
Consumption when cooling	A-Watt	8.38 - 964
Consumption when heating	A-Watt	6.35 - 730
Breakaway current	A	20(150ms)
Additional heating element	Watt	/
Electricity supply	V-Hz	115 - 60
Protection class	IP	X5
Treated volume of air (max)	CFM	206
Max volume(recommended with insulated walls)	ft^3	1060
Weight	lbs	57.6
Ventilation	Speed no.	3
Operating temperature	°F	from 19 to 104

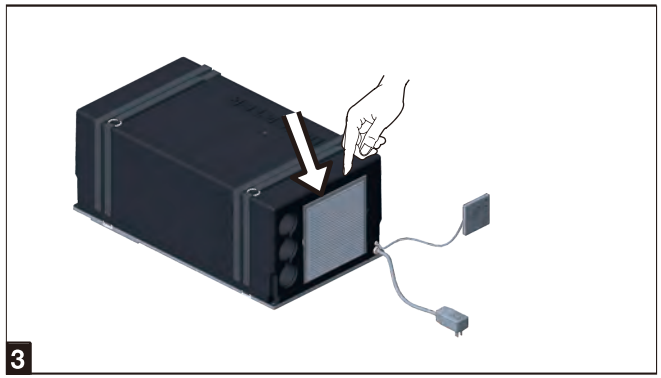
1.9. Routine maintenance



Cleaning: do it periodically, removing the dust with a moist cloth. If necessary, use a non-aggressive detergent. Never use petrol or solvents.



Checking: Do it periodically, making sure that:
- the condensation drain holes are not obstructed.
- the openings in the floor are not obstructed.

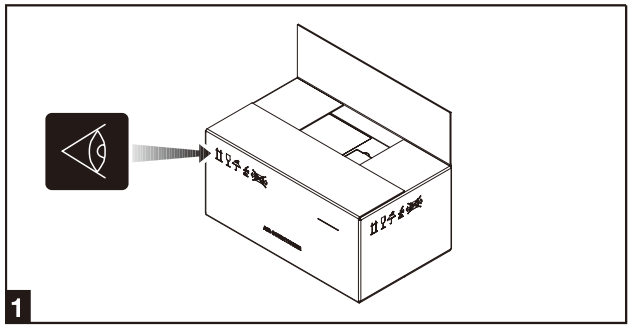


Filters cleaning (1): periodically carry out this operation; wash the filters(N.1) with a detergent solution and allow to dry before refitting.

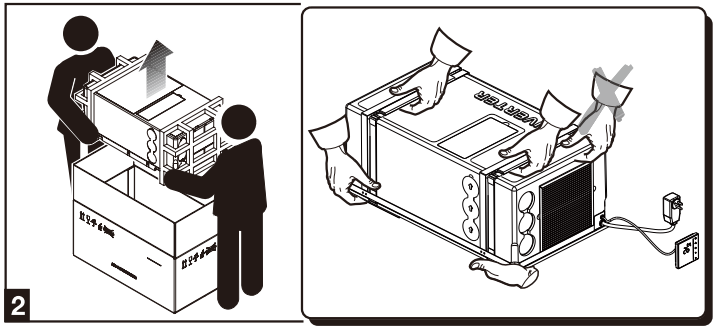
2 Information on installation

Installation can be performed by persons with specific technical knowledge. In addition to this requirement, installers must have adequate working conditions in order to ensure their own safety and that of others.

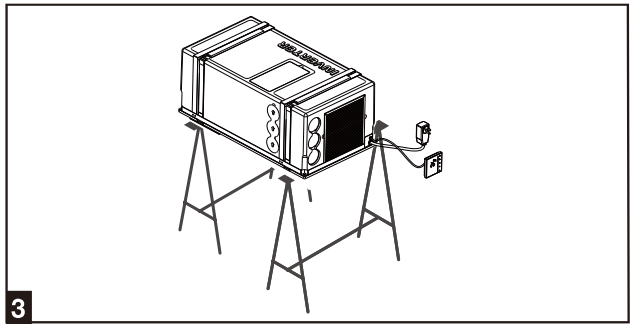
2.1. Packing, unpacking and handling

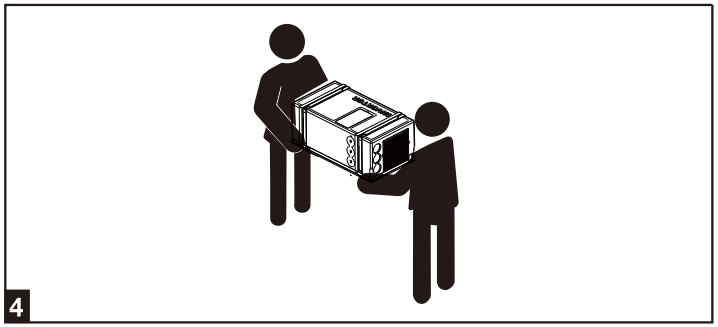


Observe the instructions given on the packing.



Lift the machine, checking it is sound.
Lift it using the handles or the belts on the base.





Transfer the machine to the place of installation in conditions of safety.

2.2. Choice of the place of installation

To accomplish uniform climate control in a vehicle, the machine must be installed as near the middle as possible, in a housing or a similar device.

Position the machine so as to ensure easy access for servicing and to facilitate disassembly and installation.

Place the assembly template in the compartment intended for installation and check the space available for the openings in the floor.

To minimize the transmission of noise and vibration during operation, the machine must have a minimum clearance on each side of 1.18 inch from the walls and fittings.

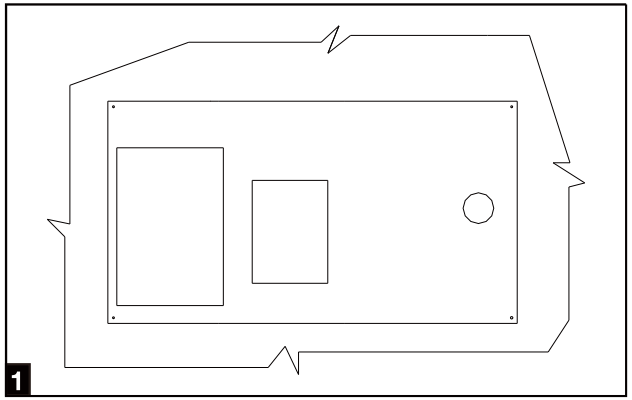
The machine must be installed on the floor.

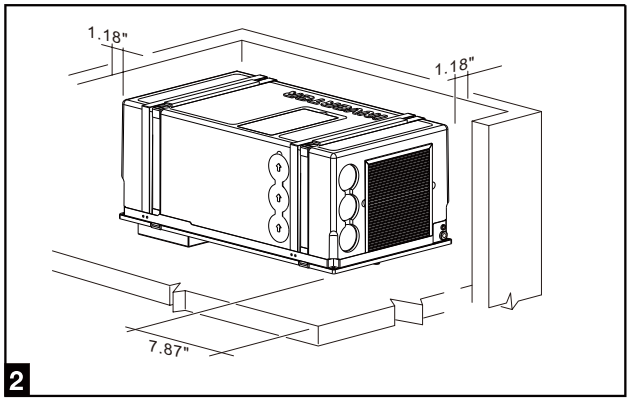
To make renewing the filter easier, keep a distance of 7.87 inch between the front of the machine and the walls of the compartment.

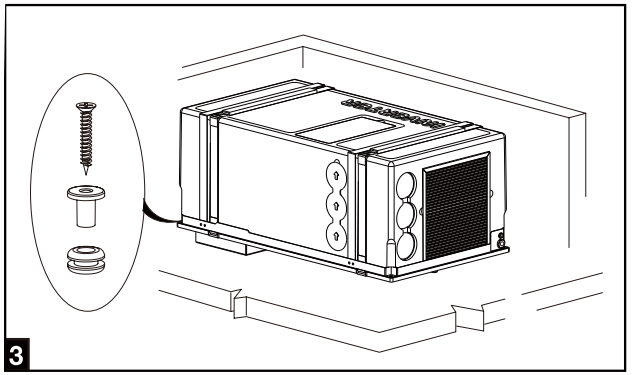
If fitting in external compartments(e.g., false bottoms), the air to be treated must be drawn in from the vehicle's passenger compartment.

Drawing in outside air can significantly reduce the power of the system.

2.3. Preparing the opening and fixing





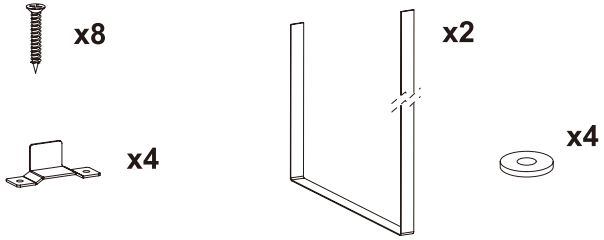


To install the machine it is necessary to create opening in the floor.
The openings in the floor of the vehicle must be accessible and, therefore, must not be covered by parts of the chassis frame behind or the like.
These openings must not be reached by splashes from the wheels; fit a splash guard or something similar if necessary.
Take care to leave a gap of at least 1.18 inch between the machine and the adjacent walls. Secure the machine to the floor using the kit provided.

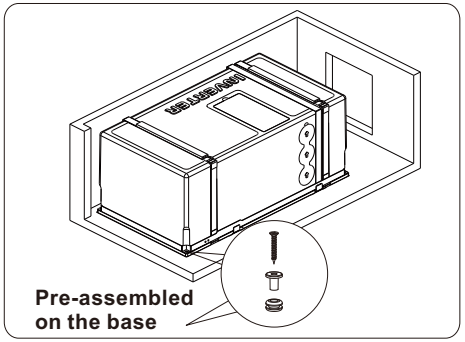
⚠ The machine must preferably be installed level. Maximum angle 10° to prevent condensation coming out.
Before making the holes, always check there are no cables, gas pipes, parts of the chassis frame or the like underneath or hidden.
Seal the machined surfaces of the openings in the floor with water-repellent products.

2.3.1. Fixing systems

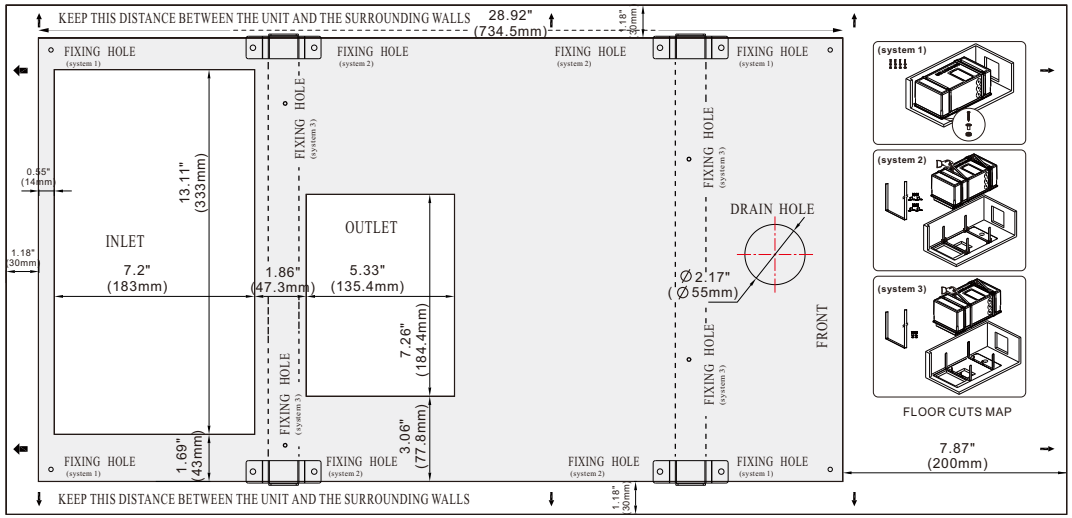
Parts supplied for the a/c fixing



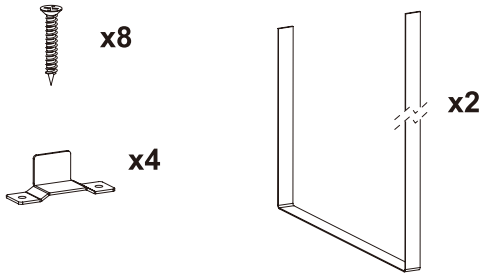
Mode 1: use n°4 screws for the a/c fixing

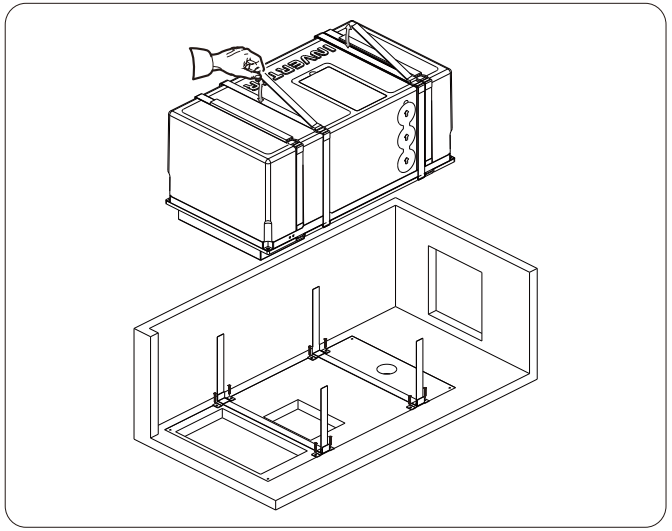


x1

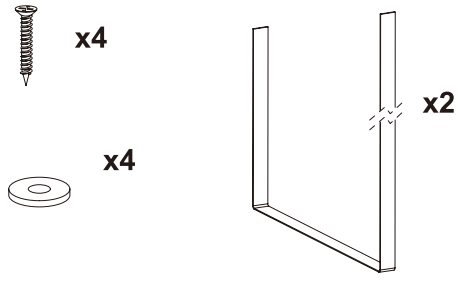


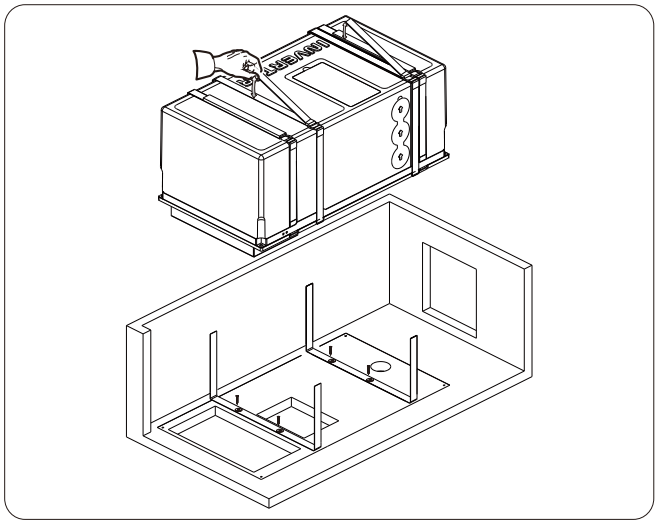
Mode 2: use n°8 screws, n°4 brackets and n° 2 belts for the a/c fixing





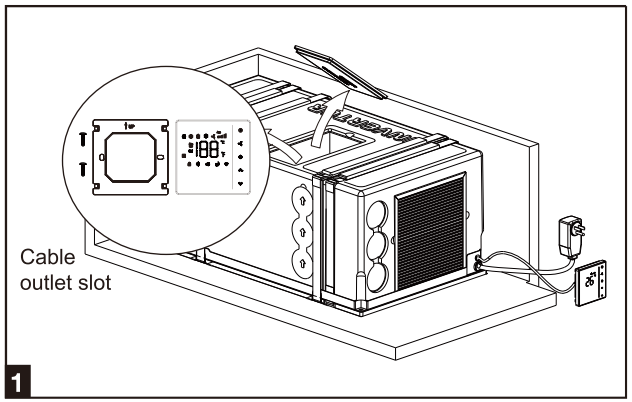
Mode 3: use n°4 screws and n°4 washers for the a/c fixing

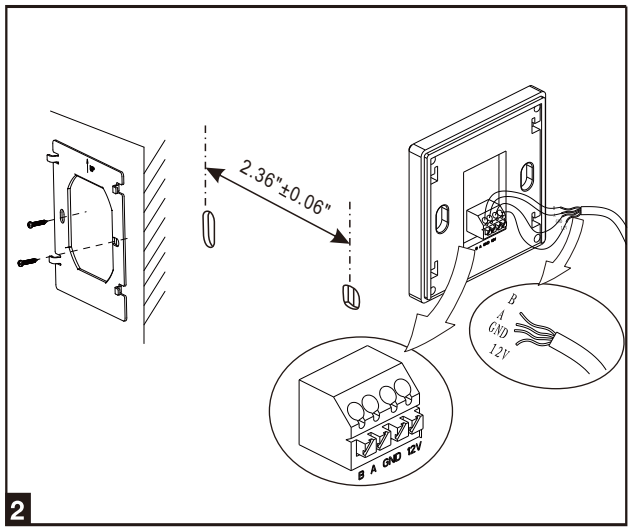


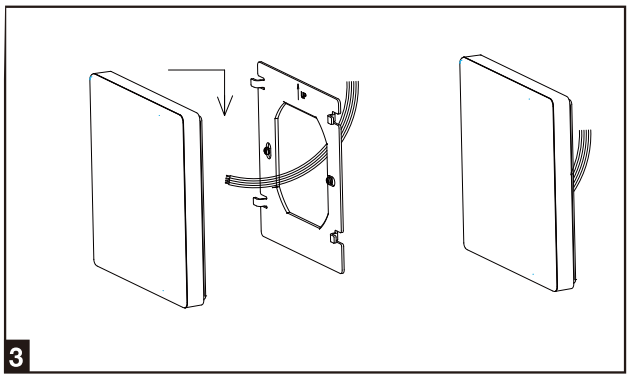


2.4. Fitting the infrared wall pad

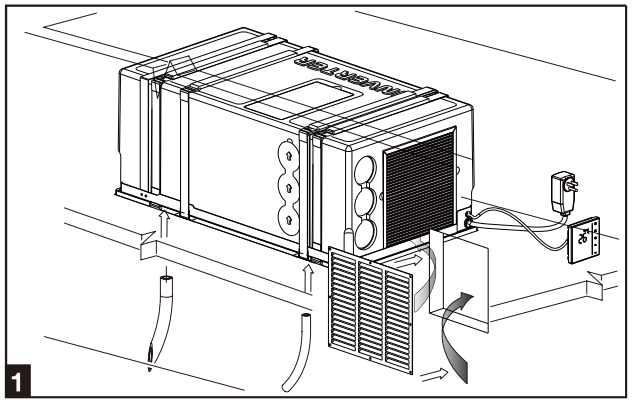
Fix the steel plate on the wall with self-tapping screws. The distance between two holes is 2.36 inch, and the hole diameter should be less than 1.97 inch, the screw is M4*0.59 inch pan head cross pointed tail tapping screw. After the correct wiring, place the thermostat against the steel plate, and then slide down the buckle to fix it.
The installation is complete.



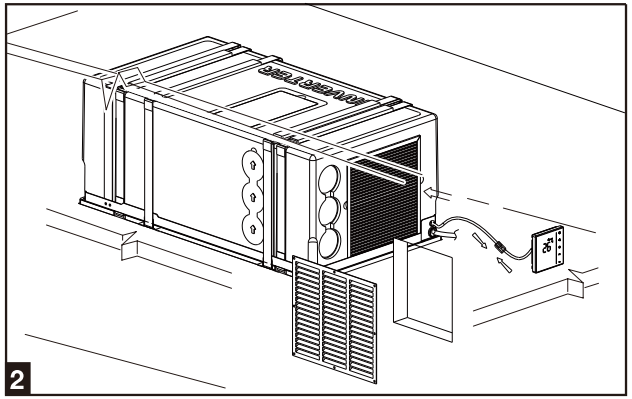




2.5. Compartment opening and electrical hook-up



1



2

Make a hole in the compartment where the machine has been installed to permit recirculation of the internal air; Close this hole with a grille supplied that allows at least 46.5in^2 of air to pass through. Install the condensation drain pipes provided, connect the receiver extension to the machine and lastly power up by inserting its plug into a socket outlet 115V - 60Hz.

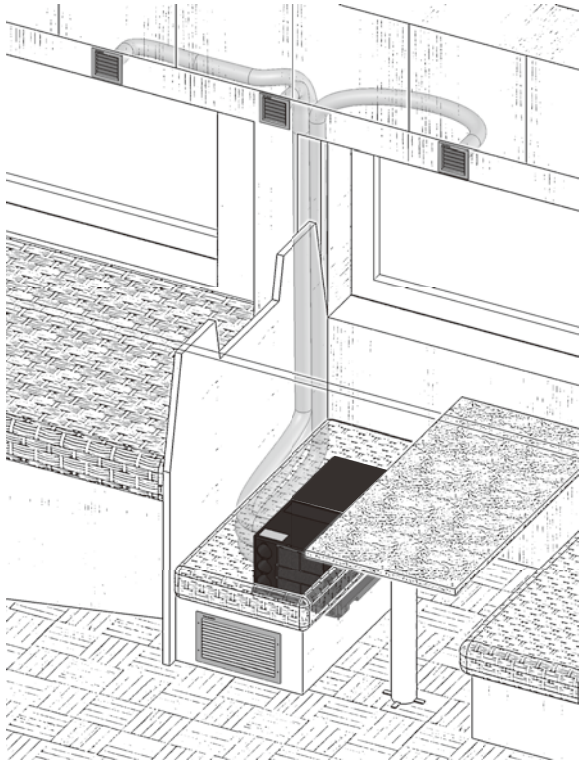
Before switching on, make sure that the campsite column and the extension used are able to withstand the power input required by the machine(see technical data or dataplate)

2.6. Air ducting

Make the air ducting with trade parts that are not supplied.
It is recommended to use cardboard pipe for air conditioning with an aluminium core and external covering of PVC with an inside nominal diameter of 2.36inch. This pipe has an outside diameter of 2.52inch.
The ventilation pipes are joined by pressing them together thanks to the tapered hole on the air outlet.
The pipes can be connected either on the outlet on the coil side or, by removing the guard and closing the front holes, on the side outlet.

To achieve the best efficiency it is recommended to:
- lay the air pipes so they are as short and straight as possible;
- not use pipes any longer than 16ft and 4.8in;
- not place the pipes near sources of heat.

The recirculation air is drawn in through a grille or through other openings with a total cross-section of at least 46.5in^2.
The recirculation air opening must be made near the machine, if this is not the case then make sure that the air flow cannot be obstructed by anyting(if necessary, create an air duct between the opening and the machine).
The recirculation air must be taken from inside the passenger compartment; if it were taken from the outside then machine efficiency would suffer.



3.1. Trouble, causes, remedies

Operations the user can perform

Operations authorized personnel can perform

CAUSE / SOLUTION	the temperature is lower than 64°F	the temperature is higher than 86°F	check the Set Point temperature	Defective thermal protection	The Mode button is not in the right position	damaged electric heating element	low gas charge	damaged compressor	dirty heat exchange coils	defective internal fan	obstructed air filter	defective external fans	clogged condensation drain holes	damaged 4-way valve	no power arrives	voltage too low (less than 103V)	defective electric condenser
the machine does not cool	○		○	●	○		●	●	●			●					
the machine does not heat		○	○	●	○	●	●	●	●					●			
air no longer circulates inside the vehicle									●	●	○						
water seeps into the vehicle													○				
the machine will not start				●				●							○	●	●
the machine stops working				●					●		○	●				●	●

3.2. Special maintenance

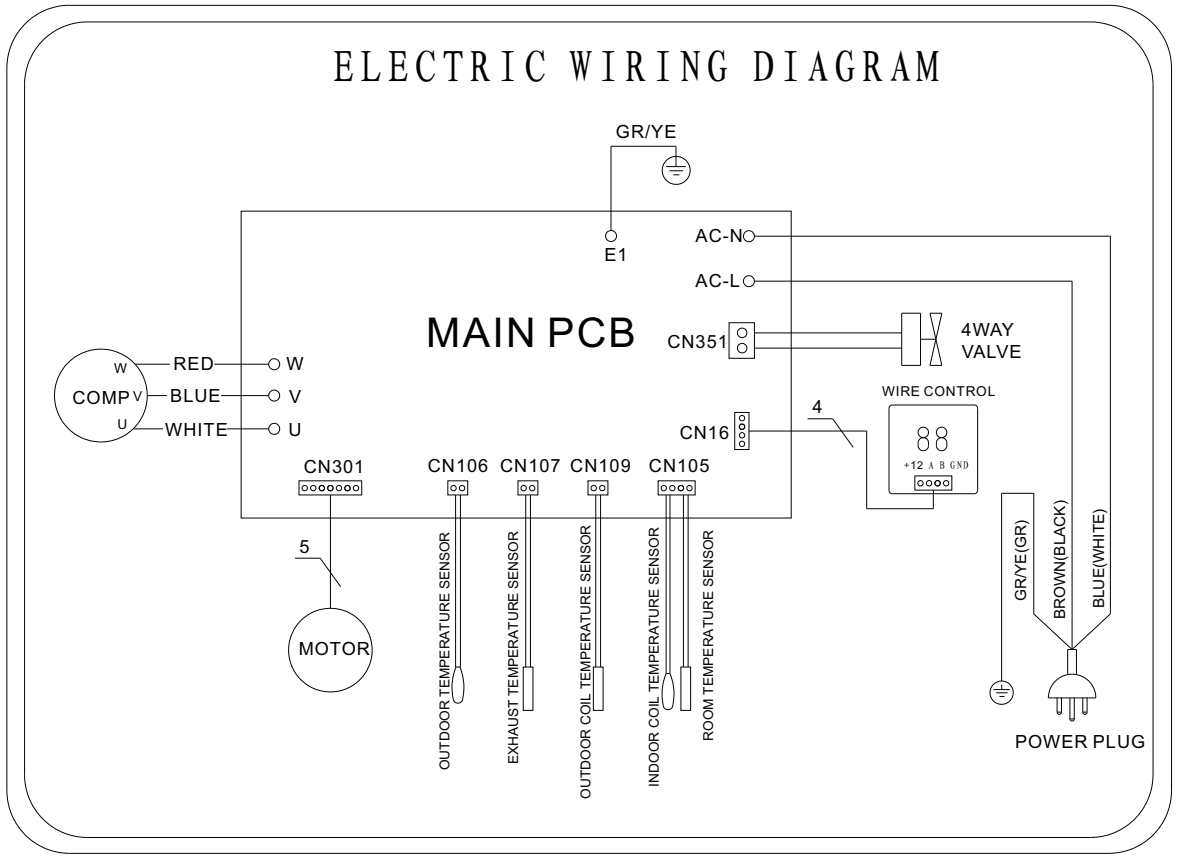
For better efficiency it is advisable to have your dealer / workshop perform special cleaning before using:

1. heat exchange coils;
2. condensation drain holes.

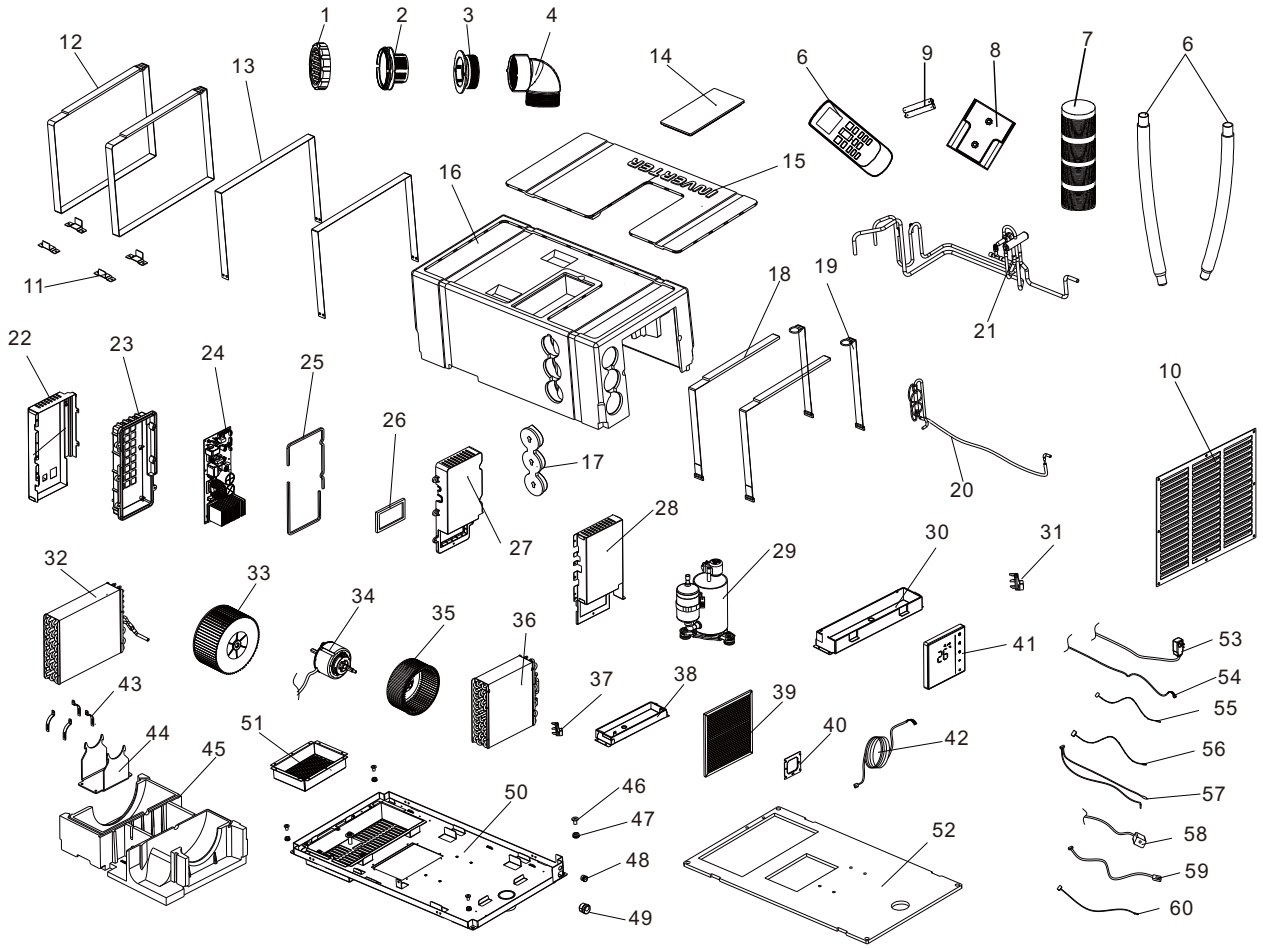
3.3. Decommissioning and recycling

For scrapping and recycling, observe the national law. Please contact your environmental authorities or authorized boards.

Wiring diagram



Spare parts list



Spare parts list

No.	DESCRIPTION
1	GRILLE
2	GRILLE SUPPORT
3	BUSH
4	90°CURVE
5	REMOTE CONTROL
6	DRAIN PIPE
7	AIR PIPE
8	REMOTE CONTROL SUPPORT
9	BATTERIES(SIZE AAA)
10	RETURN AIR METAL GRILLE
11	BUCKLE
12	FIXING BELT C
13	EPP FIXING PLATE
14	ACCESSORY BOX COVER EPP
15	HOUSING COVER EPP
16	HOUSING EPP
17	AIR OUTLET PLUG EPP
18	FIXING BELT A
19	FIXING BELT C
20	CAPILLARY ASSEMBLIES
21	4-WAY VALVE ASSEMBLIES
22	ELECTRIC BOX BASE PLATE
23	PCB MOUNTING BOX BASE
24	PCB MAIN BOARD

No.	DESCRIPTION
25	SILICONE SEAL
26	HEARSINK COVER
27	PCB MOUNTING BOX COVER
28	ELECTRIC BOX COVER PLATE
29	COMPRESSOR
30	DRAIN PAN FOR COND
31	SENSOR BRACKET
32	DONDENSER
33	CONDENSER FAN BLOWER
34	MOTOR
35	EVAPORATING FAN BLOWER
36	EVAPORATOR
37	SENSOR BRACKET
38	DRAIN PAN FOR EVAP
39	FILTER
40	WALL PAD CONTROLLER BRACKET
41	WALL PAD CONTROLLER
42	WALL PAD WIRING HARNESS
43	MOTOR RETAINING CLIP
44	MOTOR BRACKET
45	BASE EPP
46	PLASTIC BRACKET
47	RUBBER BRACKET
48	FASTENER(WALL PAD HARNESS)

No.	DESCRIPTION
49	FASTENER(POWER CORD)
50	CHASSIS
51	AIR OUTLET FIXING PLATE
52	CHASSIS FOAM
53	POWER CORD
54	WALL PAD CONNECTION CORD
55	OUTDOOR TEMPERATURE SENSOR
56	OUTDOOR COIL SENSOR
57	INDOOR TEMPERATURE SENSOR INDOOR COIL SENSOR
58	4-WAY VALVE COIL
59	MOTOR WIRING HARNESS
60	DISCHARGE TEMPERATURE SENSOR