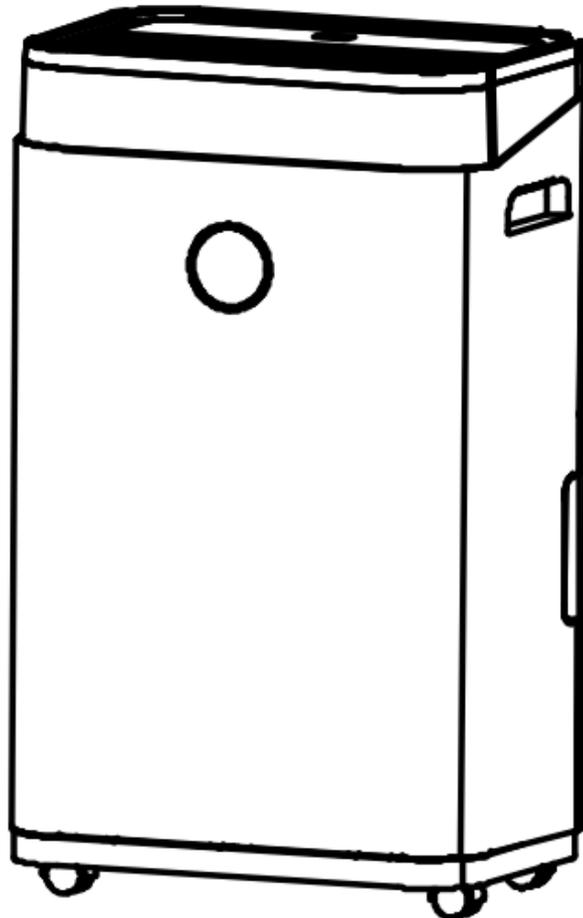


PREDATOR
POWER PRODUCTS

INSTRUCTION MANUAL



DEPT084

CE



R290

Please keep this manual carefully for further reference!

Thank you for selecting our dehumidifier. Be sure to read this manual carefully before using it. Any questions, please contact the professional service for help.

1. BEFORE YOU BEGIN

Please read the operating instructions carefully before using your dehumidifier for the first time.

1.1 PRODUCT DESCRIPTION

The dehumidifier is used to remove excessive moisture from the air. The resulting reduction in relative humidity protects buildings and their contents from the adverse effects of excess humidity.

The environmentally friendly R290 is used as the refrigerant. R290 has no damaging influence on the ozone layer (ODP), a negligible greenhouse effect (GWP) and is available worldwide. Because of its efficient energy properties, R290 is highly suitable as a coolant for this application. Special precautions must be taken into consideration due to the coolant's high flammability.

SYMBOLS FROM THE UNIT AND USER MANUAL

 warning	<p>This unit uses a flammable refrigerant. If refrigerant leaks and comes in contact with fire or heating part, it will create harmful gas and there is risk of fire.</p>
	<p>Read the USER MANUAL carefully before operation.</p>
	<p>Further information is available in the USER MANUAL, SERVICE MANUAL, and the like.</p>
	<p>Service personnel are required to carefully read the USER MANUAL and SERVICE MANUAL before operation.</p>

1.2 THE FOLLOWING SHOULD ALWAYS BE OBSERVED FOR SAFETY

- This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction 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 made by children without supervision.
- The unit is designed only for use with R-290(propane) gas as the designated refrigerant.
- The refrigerant loop is sealed. Only a qualified technician should attempt to service!
- Do not discharge the refrigerant into the atmosphere.
- R-290 (propane) is flammable and heavier than air.
- It collects first in low areas but can be circulated by the fans.
- If propane gas is present or even suspected, do not allow untrained personnel to attempt to find the cause.
- The propane gas used in the unit has no odor.
- The lack of smell does not indicate a lack of escaped gas.
- If a leak is detected, immediately evacuate all persons from the store, ventilate the room and contact the local fire department to advise them that a propane leak has occurred.
- Do not let any persons back into the room until the qualified service technician has arrived and that technician advises that it is safe to return to the store.
- No open flames, cigarettes or other possible sources of ignition should be used inside or in the vicinity of the units.
- Component parts are designed for propane and non-incentive and non-sparking. Component parts shall only be replaced with identical repair parts.

FAILURE TO ABIDE BY THIS WARNING COULD RESULT IN AN EXPLOSION, DEATH, INJURY AND PROPERTY DAMA

2. FOR YOUR SAFETY

Your safety is the most important thing we concerned!



Please read this manual carefully and fully understand before operating your dehumidifier.

2.1 OPERATIONAL PRECAUTIONS

WARNING- to reduce the risk of fire, electric shock or injury to persons or property:

- 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.
- The appliance shall be disconnected from its power source during maintenance.
- Always operate the unit from a power source of equal voltage, frequency and rating as indicated on the product identification plate.
- Always use a power outlet that is grounded.
- Unplug the power cord when cleaning or when not in use.
- Do not operate with wet hands. Prevent water from spilling onto the unit.
- Do not immerse or expose the unit to rain, moisture or any other liquid.
- Do not leave the unit running unattended. Do not tilt or turn over the unit.
- Do not unplug while the unit is operating.
- Do not unplug by pulling on the power cord.
- Do not use an extension cord or an adapter plug.
- Do not put objects on the unit.
- Do not climb or sit on the unit.
- Do not insert fingers or other objects into the air outlet.
- Do not touch the air inlet or the aluminum fins of the unit.
- Do not operate the unit if it is dropped, damaged or showing signs of product malfunction.
- Do not clean the appliance with any chemicals.
- Ensure the unit is far away from fire, inflammable, or explosive objects.
- The unit shall be installed in accordance with national wiring regulations.

- Do not use means to accelerate the defrosting process or to clean, other than those recommended by the manufacture.
- The appliance shall be stored in a room without continuously operation sources (for example: open flames, an operating gas appliance or an operating electric heater).
- The appliance shall be stored so as to prevent mechanical damage from occurring.
- Do not piece or burn, even after use.
- Be aware that refrigerants may not contain an odour.
- Pipe-work shall be protected from physical damage and shall not be installed in an unventilated space, if that space is smaller than 4m².
- Compliance with national gas regulations shall be observed.
- Keep any required ventilation openings clear of obstruction.
- The appliance shall be stored in a well-ventilated area where the room size corresponds to the room area as specified for operation.



Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorizes their competence to handle refrigerants safely in accordance with an industry, recognized assessment specification.



Servicing shall only be performed as recommended by the equipment manufacturer. Maintenance and repair requiring the assistance of other skilled personnel shall be carried out under the supervision of the person competent in the use of flammable refrigerants.

If you don't understand something or need help, please contact the dealer services

2.2 SAFETY PRECAUTIONS ON SERVICING

Please follow these warnings when to undertake the following when servicing a dehumidifier with R290.

2.2.1 Checks to the area

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

2.2.2 Work procedure

Work shall be undertaken under a controlled procedure so as to minimize the risk of a flammable gas or vapor being present while the work is being performed.

2.2.3 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.

2.2.4 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. no sparking, adequately sealed or intrinsically safe.

2.2.5 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.

2.2.6 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. "No Smoking" signs shall be displayed.

2.2.7 Ventilated area

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

2.2.8 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.

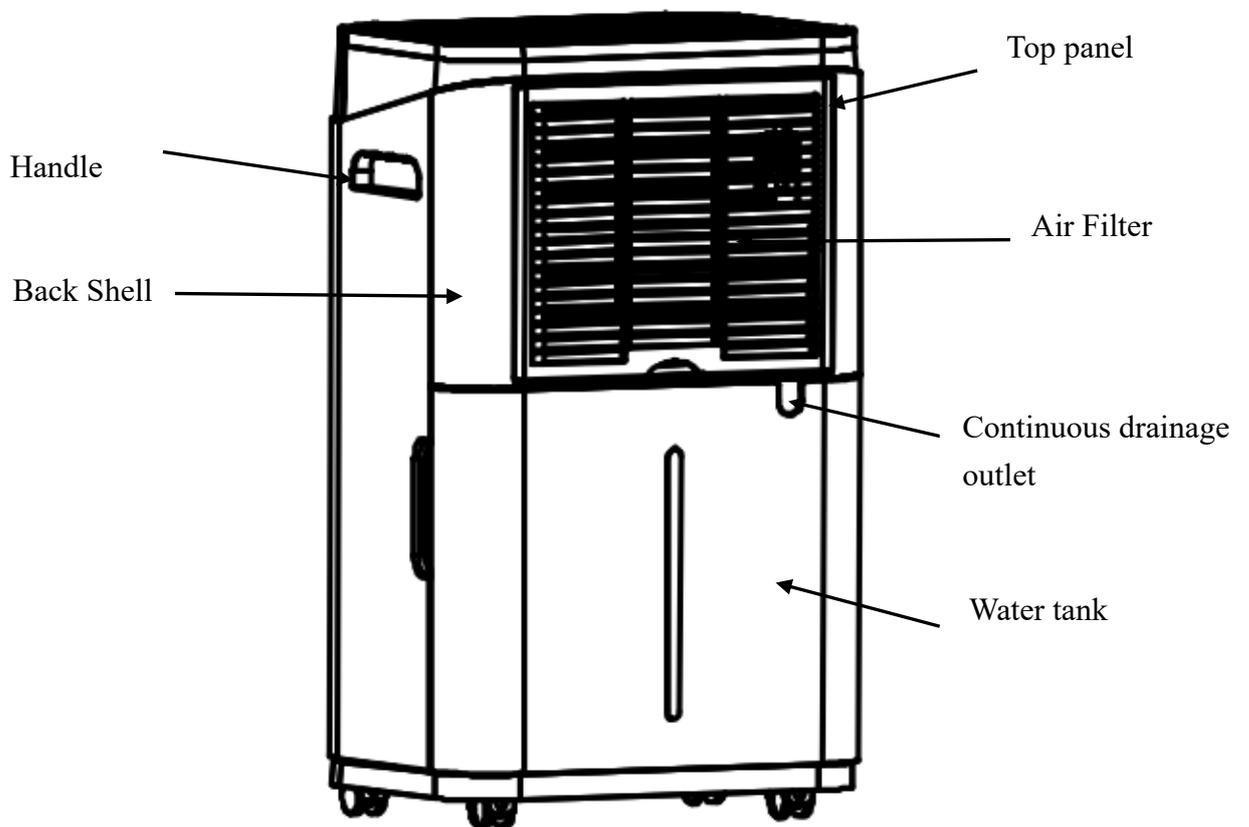
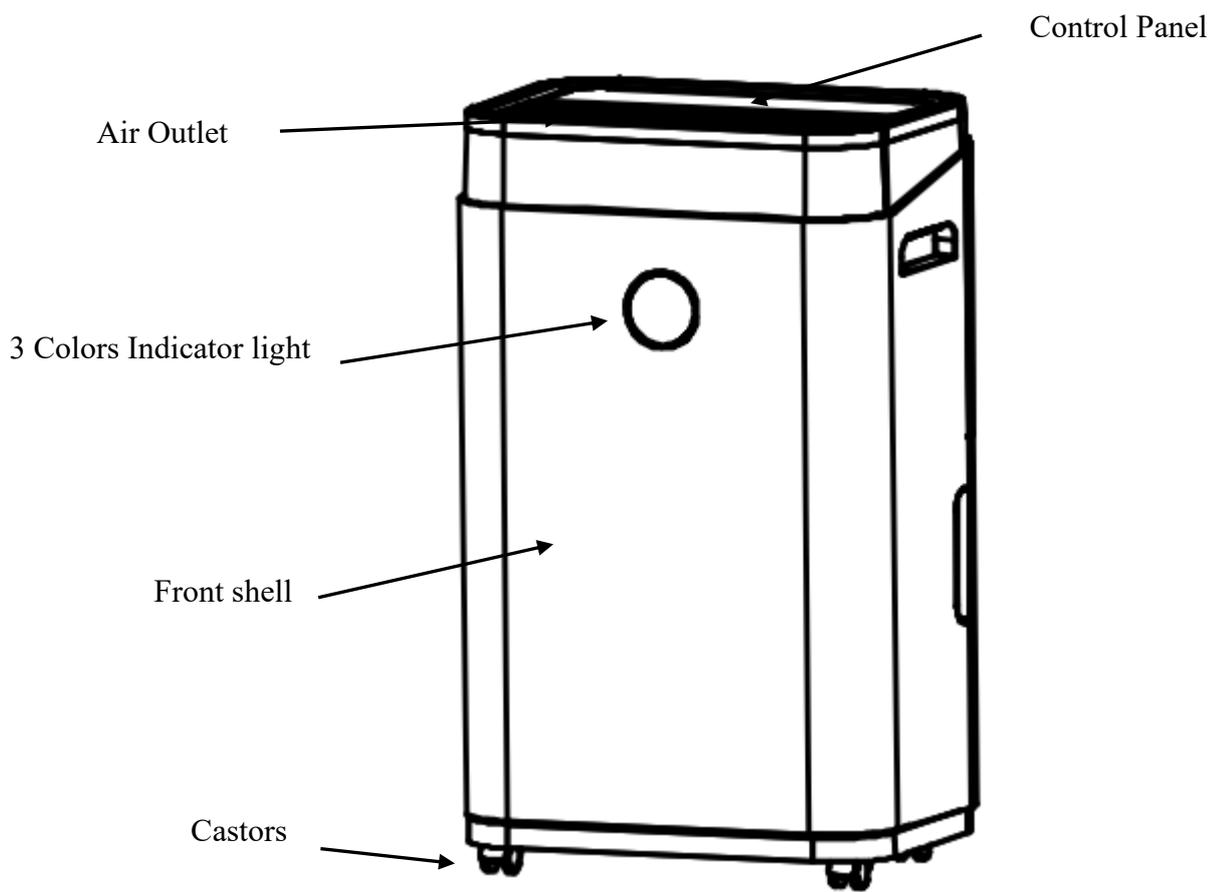
2.2.9 Checks to electrical devices

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:

- those capacitors are discharged: this shall be done in a safe manner to avoid possibility of sparking;
- that there no live electrical components and wiring are exposed while charging, recovering or purging the system;
- that there is continuity of earth bonding

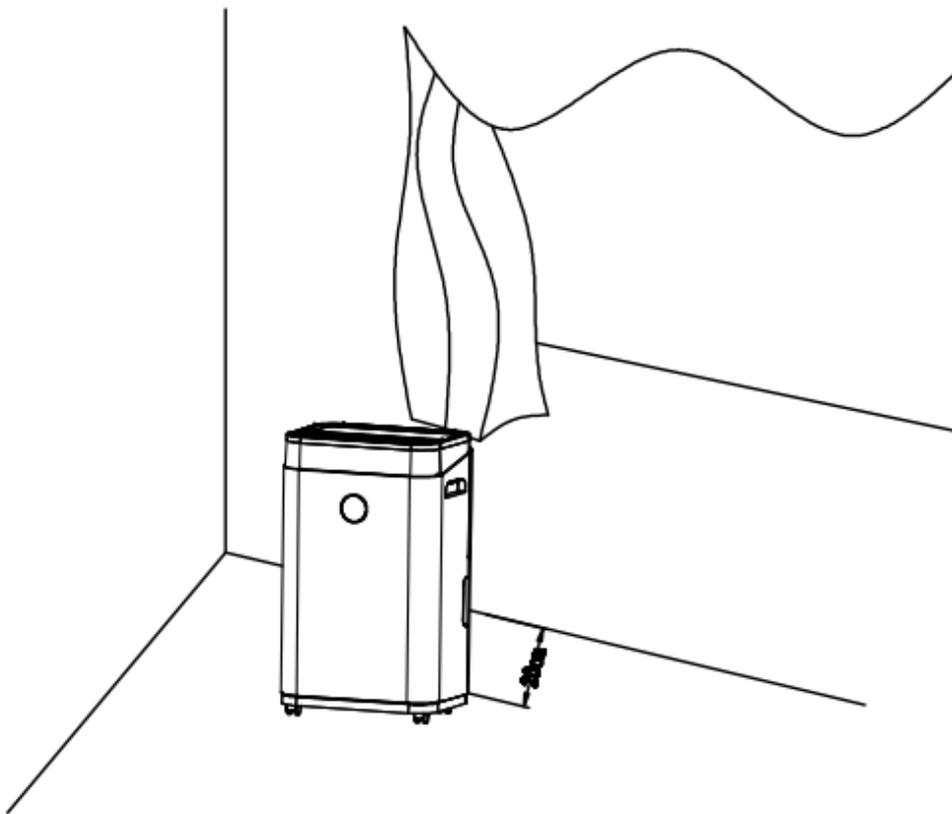
3. PRODUCT OVERVIEW



4. INSTALLATION

4.1 LOCATION

1. Place the unit on a firm, level surface in an area with at least 30cm of free space around it to allow for proper air circulation.
2. Never install the unit where it could be subject to :
 - Heat sources such as radiators, heat registers, stoves or other products that produce heat.
 - In an area where oil or water may be splashed
 - Direct sunlight
 - Mechanical vibration or shock
 - Excessive dust
 - Lack of ventilation, such as cabinet or bookcase
 - Uneven surface



WARNING Install the unit in rooms which exceed 4 m².

Do not install the unit in a place where inflammable gas may leak.



NOTE The manufacture may provide other suitable example or may provide additional information about the refrigerant odour.

4.2 OPERATING THE DEVICE SAFELY

- Check the device after unpacking for any damages or scratches on it.
- Operate this unit in an ambient temperature from 5°C to 35°C.
- Do not use in the outdoors. This dehumidifier is intended for indoor residential applications only.
- Do not operate in close proximity to walls, curtains, or other objects that may block inlet and outlet.
- Keep the air inlet and outlet free of obstacles.
- Adjusting the wind deflector in the upward direction prior to start up.
- If tipped more than 45°, allow the unit to set upright for at least 24 hours before start up.
- Keep doors and windows close for better energy saving.
- Do not operate or store the unit in direct sunlight or rain.
- It is normal for air outlet to feel warm to touch after continuous operation on hot days.
- Empty the water tank before moving the device.
- Make sure the Water tank is correctly fitted otherwise the unit will not operate properly.
- The dehumidifier starts up in the mode selected when the unit was last used.
- The dehumidifier starts dehumidifying if the room humidity is 3% higher than the selected humidity.
- There is a protective 3-minutes time delay of the compressor. Wait 3 minutes for the dehumidifier to resume dehumidification.

5. OPERATION

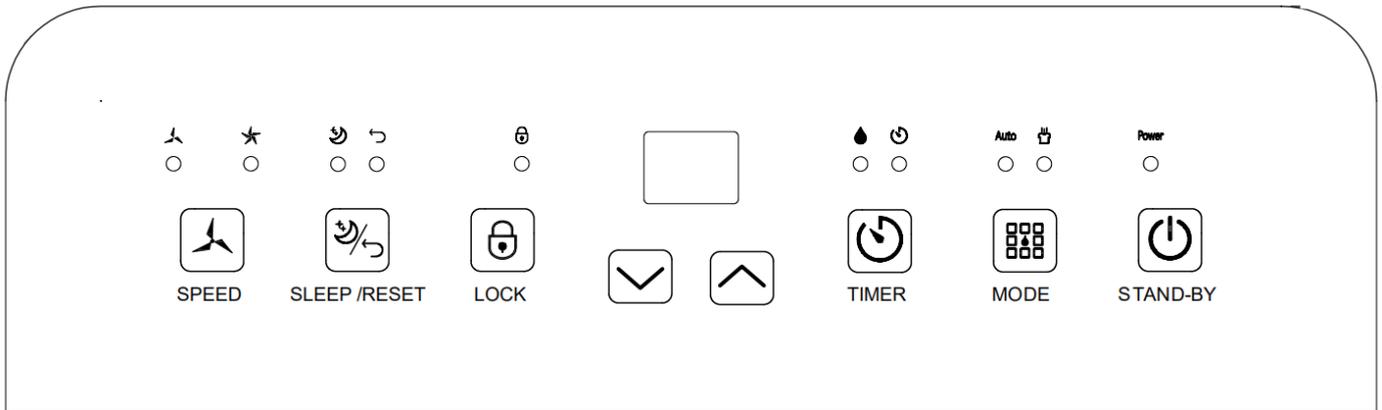
5.1 3-colors indicator light

Ambient humidity < 45%, the indicator light will show Blue

45% ≤ ambient humidity ≤ 65%, the indicator light will show Green

ambient humidity > 65%, the indicator light will show Red

5.2 CONTROL PANEL



5.3 SETTINGS



Stand By Button

Press the STAND-BY button to turn on the machine, the running indicator lights up and the default fan speed is high, and the default humidity setting is 50%. When the machine is running, press the power button to turn off, the running indicator light goes off and the compressor stops immediately, and then the fan will shut down after 30 seconds delay.



Mode button

Press the mode button to switch between Auto and Continuously dehumidify mode.

Auto mode - continuously dehumidify mode cycle, press once to switch the mode from one to another, the corresponding indicator will light up.

- **Auto mode:** when environmental humidity ≥ set humidity +3%, the fan starts working and compressor starts working after 3 seconds. When environmental humidity ≤ set humidity -3%, the compressor stops working and fan stops working after 30 seconds' delay.

Both fan speed and humidity setting can be adjusted under Auto mode.

- **Continuously dehumidify mode:** In this mode, The machine will continue to run in high fan

speed , the default humidity setting is 20% , and both the fan speed and the humidity setting can not be adjusted.



Sleep/Reset button

Press the sleep button, the indicator lights up and activate the sleep mode function and touch the button again to close the function.

In sleep mode , the fan speed will be switched to low fan speed automatically , and after no operation for 10 seconds,except sleeping mode indicator light , power indicator light ,water tank full indicator light and child lock indicator light , other the indicator lights and display screen will be off .

When room humidity $\leq 57\%RH$, the compressor will stop working and the fan will stop working after 30 seconds later

When room humidity $\geq 63\%RH$, the fan will start working and compressor will start working after 3 seconds later.

The fan speed setting function and humidity setting function is ineffective in this mode, you can not set humidity value and fan speed

In sleeping mode, when the water tank is full , the machine will not alarm , but the water tank full indicator light will be on (red color) to remind that the water tank is full and you need to empty the water tank

Long Press and hold the sleep mode button for 3S to reset the air filter . When the machine work for 600 hours , the air filter indicator light will be on to remind you to clean the air filter , and the machine will not work until you clean the air filter and long press the button to reset the air filter



Timer button

Press the timer button to set the 0-24 hour timing function. The interval is 1 hour. Each time you press this button, the value increased 1 hours and then the corresponding timing value will be displayed on the screen.

The setting value is "00" to cancel the timer function. The indicator will be off.

After the timer is set and completed, the timer indicator will be on during the timing period. After the timing is over, the timer indicator will be off automatically.

In the running state, set the timing to turn off the machine;

in the standby state, set the timing to turn on the machine.



Fan Speed button

Press this button to switch the fan speed between high and low fan speed cycle, and the corresponding indicator light will be on . The fan speed can be adjusted only in Auto mode



Add button

Press this button to set humidity and timing time;

To humidity adjusting , press one time to add 5% humidity value, the humidity adjusting follow the order as below : 30% - 35% - 40% - 45% - 50% - 55% - 60% - 65% - 70% - 75% - 80% - 30% cycle

To timing,press one time to add 1 hours timing value, the timing follow the order as below: 00-01-02-03-04-05-06-07-08-09-10-11-12-13-14-15-16-17-18-19-20-21-22-23-24-00 cycle



Minus button

Press this button to set humidity and timing time;

To humidity adjusting , press one time to minus 5% humidity value, the humidity adjusting follow the order as below : 80% - 75% - 70% - 60% - 55% - 50% - 45% - 40% - 35% - 30% - 80% cycle

To timing,press one time to minus 1 hours timing value, the timing follow the order as below: 24-23-22-21-20-19-18-17-16-15-14-13-12-11-10-09-08-07-06-05-04-03-02-01-00-24 cycle .



Child-lock (Lock)

When the machine is running, press and hold this button for 3 seconds to open the child lock function ,the indicator light will be on and you can not operate other buttons except this one . Press and hold this button for 3 seconds again to close the child-lock function ,the indicator light will be off

5.4 DRAINAGE

There are two ways of removal collected water produced by the unit.

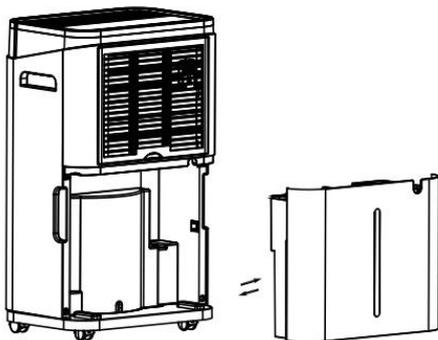
A. Manual draining: Empty water tank by manual.

B. Continuous draining: Use gravity to drain condensate water by attaching a drain hose.

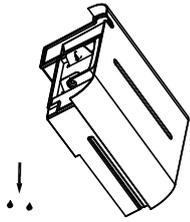
5.3.1 EMPTYING THE WATER TANK

The water tank built in unit will fill up and shut the unit down once it is full. It will run again once you empty the water tank and installed properly.

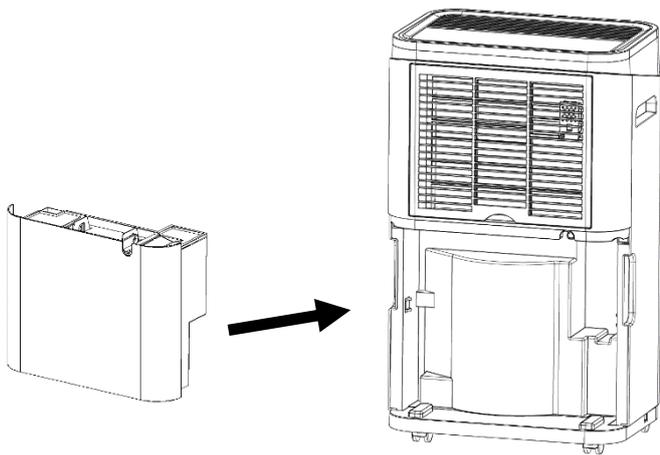
- 1) When the tank is full, The machine will buzz for 5 times, and the "Water Tank Full" indicator light will light up.
- 2) Press the POWER button to turn off the unit.
- 3) Pull on the water tank and simply slide out of the body of the dehumidifier.
- 4) Empty the water into an area with a drain or outside.
- 5) Clean the inside of the tank as well as the outside.
- 6) Replace the empty tank back into the unit.
- 7) Press the POWER button to resume operating.
- 8) If the Water Full light does not extinguish, check that the float is correctly in place.



1、 Pull out the water tank

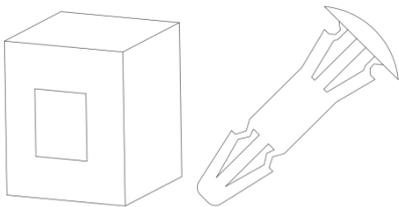


2、 Empty the water tank



3、 Replace the empty tank back into the unit

I.Warning!



1、 Do not discard the magnets and plastic rivets in the tank. Otherwise, the dehumidifier cannot be started, or the machine will not automatically stop working when the water tank is full, and the condensed water overflow will damage the floor of the room.

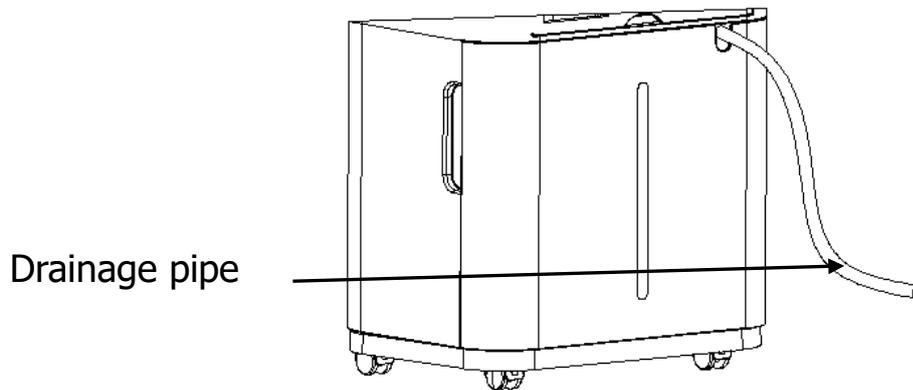
2、 Please make sure to clean the condensed water in the tank and put the tank in the original position

3、 If the water tank is dirty, please rinse it with clean water. Avoid using detergents, steel wire balls, chemical dust removers, diesel, benzene, diluents or other solvents. Otherwise, it can damage the tank and cause leaks

4、 Put the water tank in its original position. Otherwise, the indicator light will always be red and the machine cannot start working again

Continuous drainage:

- 1、 Take out the PVC pipe, Straighten the drain pipe
- 2、 Insert one end of the drain pipe into the drain outlet at the top of the tank and connect the other end to the bathroom, floor drain, outdoor or bucket like container or defined drain area



Warning

- 1、 Please do not block the drainage outlet or drainage pipe, if blocked, condensed water may overflow and result to water leakage
- 2、 Please do not bend the drain pipe. The height of the drainage pipe should be lower than the drainage outlet
- 3、 The drainage pipe must be firmly connected to the drainage outlet
- 4、 Do not submerge the end of drainage pipe into water; otherwise it may cause "Air Lock" in the pipe ,the water may not flow smoothly and result to water leakage

MAINTANCE

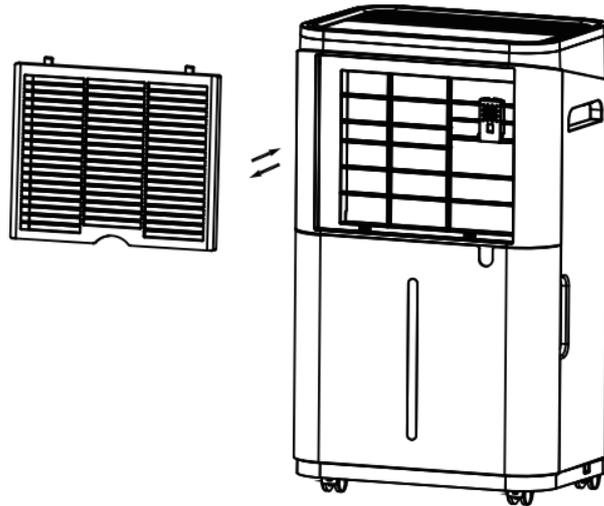
Note: before cleaning and maintaining the machine, please be sure to turn off the machine and unplug the power to avoid electric shock.

CLEANING THE AIR FILTER (every two weeks)

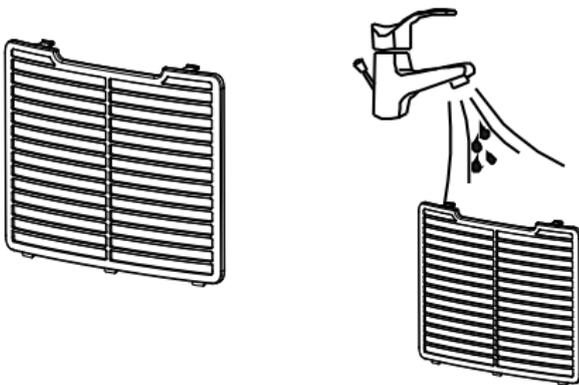
Dust collects on the filter and restricts the airflow. The restricted airflow reduces the efficiency of the system and if it becomes blocked it can cause damage to the unit.

The air filter requires regular cleaning. The air filter is removable for easy cleaning. Do not operate the unit without an air filter, or the evaporator may be contaminated.

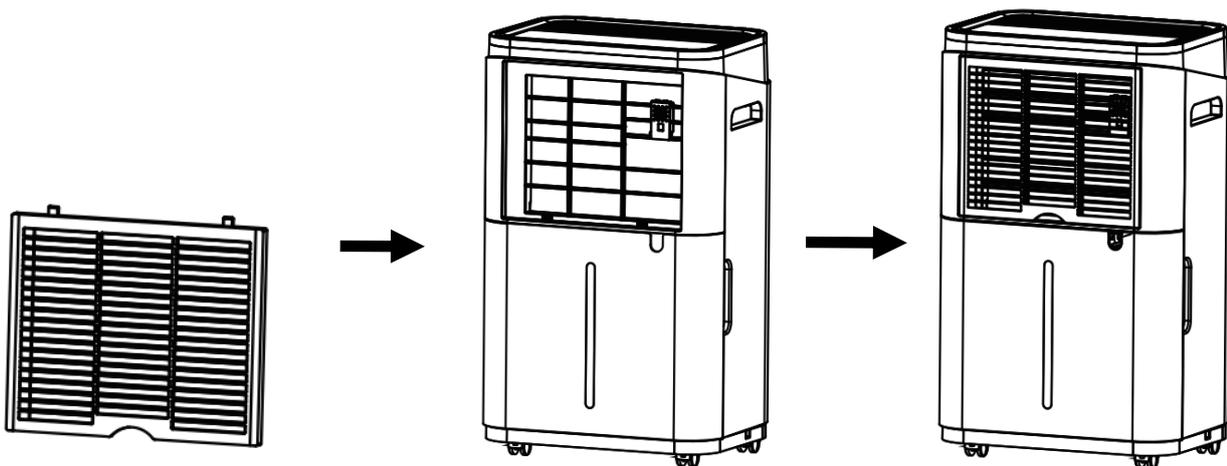
Switch off the unit and remove air filter ;



Rinse under a running water or using the vacuum to clean the dust



Reassemble the air filter



TROUBLESHOOTING

SYMPTOM	INSPECTION	SOLUTION
The unit is not operating.	✓ Check the power connection in securely.	➤ Insert the power cord securely into the wall Outlet.
	✓ Check if the water level indicator lights up?	➤ Empty the water tank and reinstall correctly.
	✓ Check the room temperature.	➤ The range of operating temperature is 5-35°C.
There is little formation of condensate.	✓ Check if the air filter the air filter clogged by dust	➤ Clean the air filter
	✓ Check if the air inlet or air outlet obstructed	➤ Remove the obstruction from the air inlet or air outlet
	✓ Check if the room temperature is below 20°C.	➤ This is normal. Machine will defrost in low temperature environment.
	✓ Set humidity level is higher than current Humidity value.	➤ Set the humidity level below current humidity value.
Water Leakage	✓ Overflow while moving the unit.	➤ Empty the water tank before transport.
	✓ Check if the drain hose is kinked or bends.	➤ Straighten the hose to avoid a trap existing.
Excessive Noise	✓ Check if the unit is securely positioned.	➤ Place the unit on horizontal and firm ground.
	✓ Check if any loose, vibrating parts.	➤ Secure and tight the parts.
	✓ Noise sounds like water flowing.	➤ Noise comes from flowing refrigerant. This is normal.
Error code	E2 ✓ Humidity sensor dampened or failure.	➤ To clean or replace the humidity sensor.
	CL ✓ Display when Room temperature is below 5°C	➤ Normal. The compressor and fan will stop working under this condition
	CH ✓ Display when Room temperature is above 35°C	➤ Normal. The compressor and fan will stop working under this condition
	LO ✓ Display when Room relative humidity is bellow 20%RH.	➤ Normal. The compressor and fan will stop working under this condition
	HI ✓ Display when Room relative humidity is above 90%RH.	➤ Normal. The compressor and the fan will keep running under this condition